

THE MARINE RECORD

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CLEVELAND, OHIO, MARCH 19, 1896.

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APPOINTMENTS FOR NEXT SEASON.

The following appointments of masters and engineers for the season of 1896, have been announced by owners:

STEAMER.	MASTER.	ENGINEER.
Averill, W. J.	Wait, W. D.	Alexander, J.
Armenia (Br.)	Coons, Charles	McGillway, James
Bothnia (Br.)	O'Brien, George	Booth, George
Cambria (Br.)	Campbell, Neil	Doran, John
Carmona (Br.)	Hill, Charles	
Calvin, D.D. (Br.)	Malone, A. H.	Smith, Thomas C.
Chieftain (Br.)	Lefave, David, Sr.	Gray, Thomas
Clyde	Lyon, Stephen	Fleming, R.
City of		
Traverse	Twichell, J. M.	Meeh, Edward
Duluth	MacLean, Donald	Chalk, Henry
Frost, W. L.	Shey, E. E.	Chestnut, James
Gould, Jay	White, James	Williams, A. P.
Haskell, W. A.	Murphy, D.	Gore, M.
Hiram (Br.)	Martin, Ephraim	Simons, John
Island Belle	Hudson, W. C.	
Johnston, W. (Br.)	Lefave, David, Jr.	Felix, E.
Langdon, J. R.	Brown, H.	Costello, D. G.
McVittie, A.	Williams, W. H.	Houghton, A. D.
Manitou	McIntyre, Allan	Peck, R. L.
Mercer, Fred	Fuller, C. E.	Teen, William
Oceanica	Todd, James	Navaugh, J. P.
Packer, H. E.	Holland, M. M.	Moore, Samuel
Packer, R. A.	Burns, John	Bluet, J.
Peerless	Page, H. C.	Bennett, J. R.
Pratt, P. P.	Pierce, G. W.	Hannah, R. A.
Prince, F. H.	Kiah, D. A.	Chestnut, Robert
Roby, G. W.	Holmes, J. A.	Young, William
Rust, D. W.	Leaver, William J.	Champaign, Jere
Reginald (Br.)	Sullivan, John	Kennedy, John
Saranac	Todd, J. M.	Leahy, J.
Seneca	Driscoll, D.	Nise, C.
Smith, Gov.	Shay, W. S.	Phillips, J. W.
Stevens, W. H.	Maloy, John H.	McSweeney, J. E.
Tacoma	Brown, James A.	Hale, George
Tuscarora	Williams, W.	Wadleigh, H. N.
Traveler (Br.)	Cossette, Alphonse	Sauve, George
Wilbur, E. P.	MacFarlane, P.	Plodeck, C. R.
SCHOONER.	MASTER.	
Augustus (Br.)	Achie, Joseph	
Badger, H. H.	Brown, Oscar	
Barnes, C. C.	Burtis, George W.	
Ceylon (Br.)	Rogues, Fred	
Norway (Br.)	Crosby, James	
Richards, J. S.	May, A. T.	
Schnette, John	Johnson John S.	
Valencia, (Br.)	Ferguson, John	

COAST AND FOREIGN SHIPBUILDING.

During February Scotch shipbuilders launched 24 vessels, of 39,391 tons (against 13 vessels, of 17,453 tons in January, and 19 vessels, of 19,816 tons, in February, 1895), of which 22, of 36,391 tons were steamers, and 2, of 3,000 tons, sailing-ships. For the year so far, 56,844 tons have been launched, against 41,784 tons in 1895, and 43,153 tons in 1894.

Sixteen vessels were in course of construction in the Stettin shipyards at the opening of the present year, and twenty-seven were delivered complete during the year 1895.

During February English builders launched 29 vessels, of which 23 were steamers, 1 a battle-ship, 1 a cruiser, 1 a hopper barge, 2 torpedo-boat destroyers, and 1 a schooner.

The New England shipbuilders continue to construct their big wooden schooners for coastwise service, and one more constructed at Bath, Me., will take the record for size. She is 16 feet longer than the five-masted Governor Ames and will be the biggest wooden schooner afloat. Her dimensions are: Keel, 245 ft.; length over all, 256 ft.; beam, 42 ft.; depth of hold, 20 ft. She will carry 2,603 tons of coal, and be owned by Mr. N. T. Palmer.

For the new Anglo-Japanese line of the Japan Mail Steamship Company, or Nippon Yusen Kaisha, six additional twin-screw steamers will be required. One

of these is being built in Japan by the Mitsu Bishi Company, and orders for the other five have just been placed with shipbuilding firms in Great Britain. Each of the new vessels will be 450 ft. in length, and of 5,550 tons, the carrying capacity being 7,500 tons dead weight, and the average speed 12 knots.

An engineer who has just returned from the far East states that he saw at a Japanese port amidst a fleet of Japanese war-vessels an especially smart-looking little torpedo-boat, flying the flag of the Rising Sun. He learned that this little vessel had been taken from the Chinese at the memorable battle of Wei-hai-Wei. She was built in the year 1886 by the firm of F. Schichau, of Elbing, Prussia. Her length is only 130 ft., barely that of a first-class torpedo-boat, and she is built of German steel. She steamed out to China under her own steam from the yard of the builder, and although she has been used as a despatch vessel all along the Chinese coast for the last nine years she is still in a perfect state of preservation, and the Japanese are continuing to use her as a despatch boat, in which capacity she has maintained her best speed. I understand that the Chinese Government ordered before the war several other torpedo-boats from the same builder, which have since steamed out under their own steam and performed very satisfactory trials at Shanghai. The firm of Schichau are at present building, besides smaller craft, a mail steamer of 18,000 tons displacement to carry two thousand passengers, also an express steamer 600 ft. long and of 24,000 horse power.—Fairplay, London.

CHANNEL TO THE SEABOARD.

Senator Hansbrough and Representative Cooper have introduced in their respective houses a bill to incorporate the Maritime Canal Co., of North America, with the following incorporators, whose names were made public some time ago: Daniel H. Burnham, L. G. Fisher, and O. D. Wetherell, of Chicago; Luther Allen, of Cleveland; F. L. Vance, of Milwaukee; L. R. Hurd and R. J. Wemyss, of Superior; W. E. Dean and Patrick H. Kelley, of St. Paul; Luther Mendenhall, G. G. Hartley, and T. W. Hugo, of Duluth; James Andrews, of Pittsburgh; Henry C. Burleigh, of Whitehall, N. Y.; John Bogart, C. H. Dutton, H. B. Slaven and G. S. Storer, of New York, and Smith M. Weed, of Plattsburg, N. Y. The capital is \$10,000,000, and permission is given the company to bond itself for \$200,000,000. It is proposed by the company to connect the Great Lakes with the Atlantic Ocean by means of a large channel. Present plans contemplate the use of the Welland Canal, and construction of a canal chiefly through Canadian territory from Lewiston, Ont., on Lake Ontario, to the head of Lake Champlain. A part of the plan contemplates the cession to the United States by Canada of the territory between New York and the north side of the canal. The Hudson River, would, of course, complete the route. The company ask for no land grants nor subsidies, but the bill provides that it shall be subject to the Interstate commerce commission, and that the government may buy it on one week's notice. The charter is said to have been drawn by General Executive Secretary Frank A. Flower, of the International Deep Waterways Association.

On November 4 last the schooner Ida Keith, in tow of the propeller Leland, collided with the water works pier in Niagara river, near Buffalo. Afterward the Keith libeled the Leland in the United States District Court, alleging \$15,000 damages for responsibility for the accident. Last Friday at Cleveland Judge Ricks found the Leland to have been at fault and left the damages to be ascertained by a commission.

NOTICE TO MARINERS.

HYDROGRAPHIC ANNOUNCEMENTS FOR MARCH.

The March issue of the Hydrographic Notice to Mariners is of considerable interest and importance, as it covers several changes which have been made during the closing winter, accompanied by a sketch of Byng Inlet Entrance, Georgian Bay, obtained by the Cleveland Branch Hydrographic Office from Capt. Ben Tripp. It is drawn on a scale of one inch to the mile, and shows a number of soundings and a considerable stretch of the bay. The changes, etc., noted in this issue, are as follows:

Change of fog signal, Portage Lake Ship Canal Pierhead Light Station, from bell to 10-inch steam whistle, to sound blasts of 3 seconds followed by silent intervals of 17 seconds.

Establishment of fixed white lantern light on outer end of breakwater at easterly side of entrance to Two Harbors; focal plane 30 feet above mean lake level.

A dangerous shoal, with but 12 feet of water over it, in the entrance of Chicago River, is reported. The shoal lies 165 feet north of center of north arm of easterly breakwater.

Upon the opening of navigation the fog signal on Gray's Reef Lightship will be a 6-inch steam whistle, sounding as follows: Blast, 1 second; silent interval, 20 seconds; blast, 1 second, silent interval, 20 seconds; blast, 3 seconds; silent interval, 15 seconds.

The red and black horizontally striped buoy, in 10 feet of water, inside new bulkhead for Lake Front Park, Chicago, and known as Randolph street Viaduct buoy, has been discontinued.

Upon the opening of navigation, fog signal on Sumner's Reef Lightship will be a 6-inch steam whistle, sounding blasts of 5 seconds' duration, separated by silent intervals of 55 seconds.

The structure from which the light at outer end of west pier, entrance to Dunkirk Harbor, was shown, has been washed away.

The structure from which the fixed white light has heretofore been shown on the west end of north pier at the entrance to Presque Isle Bay (Erie Harbor) has been rebuilt, in same location, and is now a white, square, pyramidal, inclosed wooden tower, surmounted by a white octagonal lantern, surrounded at the base by a gallery with hand rail. The height of focal plane is 21 feet above mean lake level.

The mast from which the fixed white light is shown on the east pierhead entrance to Coburg, Ont., harbor, has been increased in height, without other change, and is now 23 feet above the lake level, and visible 9 nautical (10 3-10 statute) miles from all points of approach.

The lighthouse at Point Claire, in Lake St. Louis, St. Lawrence River, has been destroyed by fire. Until a new lighthouse is built a fixed white lantern light, hoisted on a pole, will be exhibited from the end of the pier.

Copies of this issue will be sent free to any address upon application through THE RECORD.

SHEBOYGAN PIERHEAD FOG SIGNAL.

Notice is given by order of the Lighthouse Board that on or about March 20, 1896, there will be established at this station, near the outer end of the north pier at the entrance to Sheboygan harbor, west side of Lake Michigan, a 10-inch steam whistle to sound, during thick or foggy weather, blasts of 4 seconds, separated by silent intervals of 26 seconds' duration. The fog signal building is a brown corrugated iron structure, and stands immediately in rear of the light tower on the pier.

Edwin Cowles, of Saginaw, has finished his compilation of the lumber and shingle output for 1895. This State shows a great falling off, but is still in the lead. The northwestern lumber states, including Michigan, Wisconsin and Minnesota, and a few mills in Iowa, produced last year an aggregate of 7,093,398,598 feet of lumber and 2,465,368,000 shingles, of which Michigan manufactured 2,731,029,535 feet of lumber and 1,360,535,500 shingles.

LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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David C. Carter,	Detroit.		

FLOTSAM AND JETSAM.

A harbor of the Masters' and Pilots' Association is being formed at Buffalo.

Representative Snow has introduced a bill providing for a life-saving station at Port Huron.

The American and Canadian locks at the Sault will probably be connected by telephone next season.

Captains of the lightships at Cheboygan are under orders to have their vessels ready for service by March 20.

The ferry boat Shenango No. 1 has been driven westward by the east wind and now lies eight miles directly north from Erie.

The state of the ice is such that the American Eagle can make an occasional trip between Sandusky and Kelley's Island.

The Minnesota Iron Co. will pay a quarterly dividend of ½ per cent, payable April 15. The distribution will amount to \$247,500.

The new range lights at the mouth of Sandusky Bay will be completed by the opening of navigation. The three inner lights will then be abandoned.

The rock pier which caused so much trouble to navigation in the Canadian Sault Canal is to be removed by next fall, according to advises from Ottawa.

Collingwood's industrial commission is considering a proposition of Worthington & Son, Toronto, to establish a foundry and machine shop at that port.

The Cleveland & Buffalo Transit Co. contemplates sighting its several docks by connecting the light circuits with the dynamos aboard its steamers.

The bill to incorporate the Canada & Michigan Bridge and Tunnel Co., which in effect authorizes the Detroit River bridge, passed the Senate at Ottawa Monday.

M. E. B. A. No. 3, of Detroit, has just entered into a three years' lease of hall and parlors at the corner of Woodward and Jefferson avenues. A series of entertainments and lectures is being arranged.

THE RECORD is advised by Secretary James H. Channon that the name of the Ketcham Steamship Co. has been changed to the Chicago Transit Co.

The Vessel Owners' Tug Co., of Toledo, controlled by Nagle & Hadley, will operate the tugs Wisconsin, Logie, Johnson, Moon and Tuttle. The tugs will have white stacks with black tops.

The Cleveland & Buffalo Transit Co. announces a canal line to be run in connection with the boats to Cleveland. It will be known as the Central Transit Line and will be managed in New York by T. B. Lynch.

Ingar Oleson, formerly of the Milwaukee life-saving station, has been appointed keeper of the Plum Island station, and Capt. Peter Oleson, for the past 16 years

keeper of the station on North Manitou Island, has been transferred to the Bailey's Harbor station.

Congress is asked to appropriate \$5,000 for a light and fog signal at Ottawa Point, at the entrance to the natural harbor of refuge at East Tawas.

Capt. John P. Nicholson, of the L. Watson Stephen-son, was married Monday night, the 2d inst., at Pesh-tigo, to Mrs. Alice E. Whitworth, of Marinette.

Citizens of Manitowoc are endeavoring to have gold medals awarded the members of the life-saving crew who distinguished themselves in the rescue of 13 persons from the W. L. Wetmore in 1894.

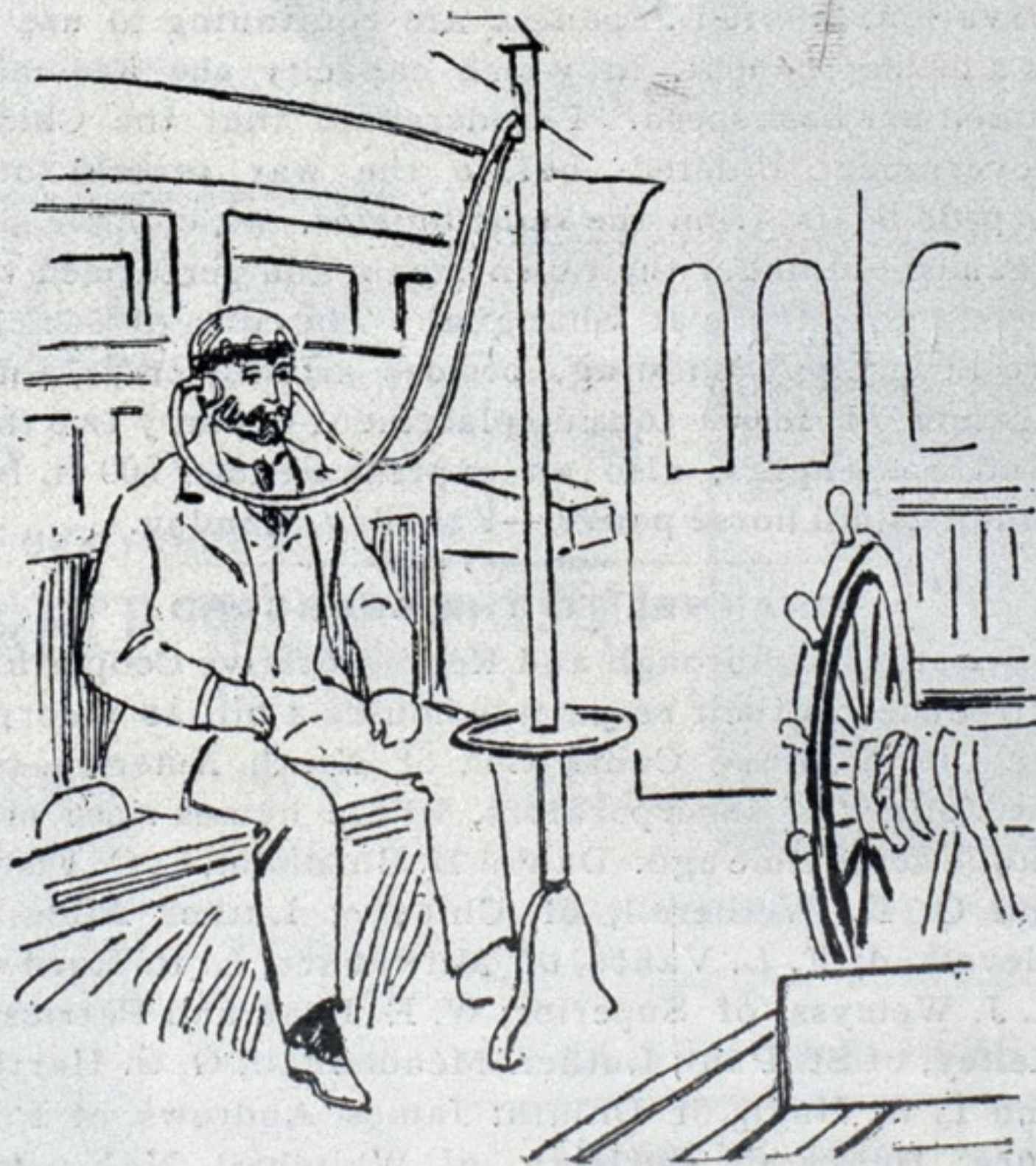
Vessel owners are contesting with a local club over the position of a desired light in Little Bay de Noque. Vessel men want it at Saunders Point, but the club wants it at Squaw Point. Which will win?

Vessel owners are asking that a light be erected at the inner entrance to the straight channel on the star-board side, so as to make it convenient for vessels to pass through at night. If not done at public, it must be put up at private expense.

For the months of December, January and February Milwaukee shipped by lake 915,746 barrels of flour, 202,614 bushels of wheat, 1,135,397 bushels of oats, 755,618 bushels of barley, 5,000 bushels of rye and 19,317 tons of millfeed. Grand total of grain, 2,094,111 bushels.

Work has yet to be completed at the following points on the 20-foot channel: Vidal Shoal, Little Mud Lake and Sailors' Encampment. The prospects are that a 20-foot channel having a width of 200 feet at the Vidal Shoal and 150 feet at Sailors' Encampment will be completed by July 15.

Lieut. Wm. Babcock, executive officer of the U. S. S. Michigan, died at the University Club, New York, from



THE EOPHONE.

pneumonia, at the age of 44 years. He was the second son of John P. Babcock, a distinguished lawyer of Fremont, O.

The Business Men's Association, of Detroit Harbor, wants to replace the red nun buoy on the 18-foot spot at the entrance to Death's Door Passage to Green Bay with a bell buoy. They want the co-operation of all ves-sel men. The cost would be \$350.

Capt. Archie McLachlan has been appointed master of the D. & C. liner City of Cleveland, as the RECORD pre-dicted last week. Capt. McLachlan's former post of pilot has been given to John McCollum, who was last season first officer of the City of Alpena.

The Port Arthur & Duluth Steam Packet Co. (head-quarters at Windsor, Ont.) are giving extensive re-pairs to their passenger steamers Cambria and Carmona, and refitting them in first-class style. They are seri-ously considering coming as far east as Sandusky.

Oswego Harbor has \$32,000 left over from last year, with which Capt. Kingman, engineer in charge, pro-poses to begin the work of deepening the mouth of the river by constructing a curved jetty to terminate upon the line of the outer breakwater and 500 feet from it, leaving an entrance of that width. The jetty will start in comparatively shallow water, an opening for small craft and for water circulation being left open. The cost of the improvement is estimated at \$197,000.

LIEUTENANT TORRE AND HIS EOPHONE.

The eophone, or sound-catching instrument invented by Lieut. Frank Della Torre, which was described in the RECORD on February 27, was given a severe test a couple of weeks ago on the tug Daniel S. Lamont, in New York harbor, and proved eminently satisfactory, even in a high wind.

The instrument which receives the sound is shaped like an anvil, and is placed on top of the pilot house. From it extend two tubes, which penetrate the roof and reach a point abaft of the wheels. At the end of each tube is fixed a transmitting pipe. These fit into aper-tures on either side of a mask, which is placed on the head of the man using the apparatus, and connect di-rectly with his ears.

When the eophone was tried in New York Bay re-cently half a gale was blowing and there was a sharp squall of snow coming down. The experimenters who tested the mask were the inventor, Della Torre, and Chief Inspector of the National Board of Marine Under-writers R. M. Hanna. Notwithstanding the conditions of the weather, the experimenters heard with ease the noise made by the blowing of whistles and the emitting of exhaust steam by other tugs fully half a mile to lee-ward. They could not see the other tugs, but unfa-ilingly succeeded in pointing the arrow, arranged for the purpose of guiding the wheelman, directly to the posi-tions occupied by the vessels which were used in the trial.

The inventor says he has heard whistles fifteen miles off, and in fog, when there is no wind, he can hear a greater distance. The echoes of the eophone can be heard when they strike any solid substance, and it is said that a small spar buoy has been picked up in this way.

TACOMA'S COMMERCE.

Harbormaster Clift makes the following report of the ocean commerce at the port of Tacoma for the month of February, 1896:

IMPORTS.		Value.
Two cargoes Oriental merchandise.....		\$300,000
EXPORTS.		
583,169 bushels wheat (Europe and Africa).....		\$385,247
44,569 barrels flour (China and Africa).....		133,176
3,576,082 feet lumber.....		35,300
24,000 tons coal.....		72,000
Merchandise to Japan and China.....		264,504
" " British Columbia.....		24,000

Total \$914,227
Same month last year 441,529

Inward registered tonnage, 41,980; inward cargo ton-nage, 7,590; outward registered tonnage, 45,219; out-ward cargo tonnage, 57,400; deep sea arrivals, 28; de-partures, 30.

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD by George F. Stone, Secretary Chicago Board of Trade, March 14, 1896.

CITIES WHERE STORED.	WHEAT, Bushels.	CORN, Bushels.	OATS, Bushels.	RYE, Bushels.	BARLEY, Bushels.
Albany.....		9,000	35,000		6,000
Baltimore.....	117,000	820,000	100,000	98,000	
Boston.....	393,000	61,000	11,000		
Buffalo.....	1,492,000	89,000	27,000	225,000	523,000
" afloat.....	203,000		223,000		208,000
Chicago.....	19,388,000	4,983,000	1,359,000	393,000	14,000
" afloat.....	512,000	5,464,000	881,000		
Cincinnati.....	12,000	2,000	16,000	14,000	64,000
Detroit.....	292,000	13,000	9,000	13,000	7,000
" afloat.....					
Duluth and Superior.....	12,095,000	113,000	983,000	187,000	154,000
" afloat.....	512,000				
Indianapolis.....	81,000	60,000			
Kansas City.....	1,290,000	138,000	44,000	27,000	
Milwaukee.....	420,000	2,000	17,000	249,000	44,000
" afloat.....	176,000		120,000		
Minneapolis.....	19,085,000	38,000	634,000	113,000	263,000
M. nreal.....	880,000	57,000	283,000	3,000	55,000
New York.....	2,688,000	120,000	1,525,000	10,000	62,000
" afloat.....	188,000		27,000		45,000
Oswego.....					
Peoria.....	20,000	190,000	327,000	5,000	
Philadelphia.....	323,000	303,000	147,000		
St. Louis.....	1,219,000	1,265,000	460,000	3,000	1,000
" afloat.....		114,000			
Toledo.....	707,000	829,000	59,000	127,000	
" afloat.....					
Toronto.....	32,000		86,000		12,000
On Canal.....		8,000	12,000		
On Lakes.....					
On Mississippi.....		208,000	25,000		
Grand Total.....	62,123,000	14,886,000	7,410,000	1,467,000	1,533,000
Corresponding date 1895.....	76,873,000	13,439,000	6,350,000	292,000	1,004,000

THERE has been introduced a bill (S. 1701) to provide for the retirement of revenue service officers after thirty consecutive years of service, or upon proof of legitimate disability.

MARINE LITIGATION.

INTERPRETATION OF THE HARTER ACT.

A case which will be of interest to vessel owners has lately been decided in England, in which the construction of the Harter act came into question. Action was brought by the owners of the steamship Glenochil against the owners of a cargo of oil-cake for a balance of freight due. The latter admitted the claim of the former, subject to a counter claim in respect of damage occasioned to the cargo by the negligence of the shipowners' servants. The cargo referred to was carried by the Glenochil from New Orleans to London under a bill of lading which incorporated, by words added to it "the terms and provisions of and all the exemptions from liability contained in the act of Congress of the United States, approved on the 13th of February, 1893." On the voyage the vessel met with exceptionally bad weather, with the result that the sounding pipe communicating with one of the water ballast tanks was broken owing to straining. This tank it became necessary to fill with water, as the discharge of the cargo went on,

respect of the cargo, and that the exemption meant by the 3d section is primarily a fault arising in the navigation or management of the vessel, though it may indirectly affect the cargo, and they held that the damage to the cargo was the result of negligence in the "management" of the vessel, that Section 3 applied, and that the shipowners were therefore exempted by the words of the bill of lading. They pointed out that "management" goes somewhat beyond "navigation," and takes in cases of the same class as that before them, which do not affect the sailing or movement of the vessel, but do affect the vessel herself. They also came to the conclusion that Section 3 above referred to does not confine the exception as to the "management" of the vessel to the period while the ship is being navigated, but extends the operation of the exception to the period while the cargo is on board and still undelivered, that is, from the time the cargo is taken on board to the discharge.

LARGEST SAILING VESSEL IN THE WORLD.

A little more than three years have passed since the proud German five-master Maria Rickmers started

THE OLD CITY OF BUFFALO.

A story was recently printed in the Sunday Times-Herald, of Chicago, which has since been copied by several papers at lake ports, which purported to be an interview with Professor John P. Barrett, chief electrician of Chicago, and which was a thrilling story about the alleged hair-breadth escape of the old steamer City of Buffalo in the 50's. Editor Watson, of The Ensigner, New York, snuffs out the romance as follows:

Some one has sent us a reporter's story of a pretended thrilling incident which occurred, it is said, on the old City of Buffalo, formerly of the Michigan Southern Railroad Line. According to the Times-Herald of Chicago, a man named Barrett was (at 19 years of age) a wheelsman on her and came near running her ashore at Fairport, O., but more by good luck than by good management, she went clear. The story dilates at length upon the peril of the 1,100 (!) passengers, and winds up by asserting that the wheelsman smashed an oiler in the mouth at Cleveland because he asked who was at the wheel that morning, the oiler having seen the peril the steamer was in.

This is a good enough incident for a Sunday newspaper story, but as a narration of facts it is defective. No oiler was ever smashed in the mouth or elsewhere



THE GERMAN FIVE-MASTED STEEL SHIP POTOSI—The largest Sailing Vessel Afloat.

in order to stiffen the ship, and the engineer thereupon opened the cock to admit the water without having first used the sounding rod or taken any steps to ascertain the condition of the sounding pipe. The result was that the water on being admitted to the tank forced its way up the broken sounding pipe, and escaping into the hold damaged the cargo. The cargo owners contended that Section 3 of the Harter act did not apply, as the exemption contained therein referred to faults and errors in sailing the vessel or in managing the sailing of the vessel, and that the terms "navigation" and "management" under the provisions of that act meant the same thing, and only applied to the period of navigation itself, which they claimed ended when the ship came into dock. They also contended that the intention of that act is to prevent the vessel owner putting anything in the bill of lading to protect himself from negligence in the care of the cargo, and that what was complained of was neglect in the care of the cargo and not in the management of the ship.

The court, in giving judgment, distinguished Sections 1 and 3 of the Harter act, pointing out that the first prevents exemptions in the case of direct want of care in

from an English port on her second voyage, from which she never returned. Only one sailing vessel of similar dimensions has been built since, the French five-master La France, but now Germany has become the possessor of the largest sailing vessel in the world. On June 8, 1895, the five-master Potosi was launched from the yards of Tecklenborg, and made her first voyage to Iquiqui, a distance of 11,000 miles, in 72 days, arriving at that port early in October. The vessel is owned by the well-known Hamburg house of F. Laeisz. The Potosi is about 426 feet 6 inches long, 52 feet 5 inches beam, and 32 feet 9 inches deep. She has a capacity of 6,150 tons, or 550 tons more than the La France. The uninitiated may obtain a better idea of the great size of this vessel from the following figures: 5,511,500 pounds of iron were used in the construction, and the vessel, which will make regular trips to the western coast of South America for saltpetre, can carry about 13,227 bags of this salt. We are indebted to the American Shipbuilder, of New York, for the illustration.

THE U. S. monitor Monadnock made 11¼ knots on her trial trip and otherwise behaved admirably.

by a wheelsman 19 years of age, or any other age, on the City of Buffalo. The City of Buffalo never ran to Cleveland, and she never had 1,100 passengers on her at any time. The steward used to say that the passengers on any trip never paid for the roast beef used. Moreover, we don't remember any wheelsman 19 years of age on the boat and our memory is pretty good yet. It took two able bodied men to handle her, she steered so hard.

CAPT. FRIETSCH'S NEW BOAT.

Capt. Adolph Frietsch will sail around the world in a 28-foot boat which he will call the "Schlitz Globe, after a well known advertising device by that Brewery. In consideration of the advertisement the Schlitz company will defray the expense of fitting out the expedition. Capt Frietsch will build his boat on a piece of land on the lake front, near the water works, owned by A. A. Hathaway, and will charge a small admission fee. He will make the trip alone and will take some samples of beer with him. He will make the start about July 4, and after crossing the Isthmus of Panama will strike out for Japan via the Sandwich islands.

THERE are over 8,000 patents on steam engines.



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CLEVELAND, O., MARCH 19, 1896.

WHY CANADA FAVORS THE BRIDGE.

The Ottawa Parliament has declared in favor of the Detroit bridge bill by an overwhelming vote. This was to be expected, and the Canadian Parliament, in the expression of its views, has shown most sound sense. Its grant of permission should be one of the most potent arguments for an equally forcible refusal on the part of Congress, if that body is to show itself worthy of comparison to the Ontario Parliament on the line of patriotism.

Canada has every reason to favor the bridge. The slight damage to her limited water commerce is a minor consideration, when compared with the benefits such a bridge would offer to Canadian railroads, which are in such active competition with the lines of the United States. An American line would bear the burden of the expense of such a structure, and all Canadian roads would share in its benefits.

Congressman Towne's statement that the erection of a bridge at Detroit would result in a canal from Lake St. Clair to Lake Erie, with an outlet east of Point Pelee, must be considered as a prediction rather than as a threat. The expense and delays of locking, etc., have been outlined and exaggerated, but it remains a fact that a company is already organized to construct such a canal and that the fall is so slight that not more than one lock will be necessary to control the water. The saving in time to vessels bound for lower Lake Erie and Lake Ontario points would be considerable, and the great factor of dangerous Detroit River navigation would be eliminated. For the city of Detroit the loss of business occasioned by this diversion of the route of so many vessels would amount to little, and would be more than offset by the benefits to be wrought by a bridge; but the advantage of such a route through Canadian territory would be immense, from both commercial and naval standpoints. As stated before, there is every reason why Canada would be benefited by a bridge; but every dollar gained in this matter is taken from the commerce of the United States. Canada is openly allied with her great railroad interests. Under existing conditions in the United States, the necessity of regulation has placed Congress in the light of an opposer of railroad encroachments, and as a patron of water commerce as a necessary means of regulating the railroads. By favorable action on the Detroit bridge bill Congress will stultify itself as unpatriotic and indifferent to the commercial interest of the great Northwest.

Interested parties are circulating a print of the proposed plan of the bridge with two of the largest lake steamers, end to end, between the piers. This is a sorry subterfuge tending to mislead Congressmen and others into believing that two vessels could pass through broadside without risk.

KEEP UP WITH THE PROCESSION.

The marine editor of the Door County (Wis.) Advocate is contributing a series of instructive articles on navigation to his paper. He has been urging his readers among the masters to make their work surer by the acquirement and use of the more simple but most useful elements of navigation. That his efforts are appreciated in official quarters is shown by a communication from Commander C. D. Sigsbee, of the Hydrographic Office, warmly commending these articles. Commander Sigsbee says: "I trust you will continue to urge on lake navigators the proposed change in the unit of measure from the statute to the nautical mile. I regard this change as a matter of the first importance on the lakes. So long as the navigators on the lakes continue to use the statute mile, they will remain outside the field of universal literature of navigation."

This letter must furnish the ground for a little further exhortation on the part of the RECORD. The use of the principles of navigation in lake sailing is, with a few exceptions, a novelty, and is looked upon in many quarters as an unnecessary innovation. "Logarithms and azimuths and the like" are most cordially damned by a class of masters who have already achieved their success, and whose abilities in business and pilotage alike are of no secondary order. They must remember, however, that with the advent of monster ships and of metal tonnage, new problems and new contingencies arise, which call for a wider extent of information on the principles of navigation to help a master out of deeper trouble in case something unforeseen occurs.

The most important phase of this subject to the people to whom it is directed lies, however, in the following fact: The above claims are recognized by the younger element which is entering the ranks of the licensed officers, and it is impossible for anyone to ignore the fact that the command of many of the larger and more important lake craft is passing into the hands of these younger men. This is not, perhaps, because they are better posted in the elements of navigation referred to than are their seniors, for this is not true with regard to many of the younger men; but because of the fact that they are receptive, anxious to learn these and other things as they are introduced.

It is with the disposition shown by many of the senior element that the fault is to be found. They may be well satisfied, without being open to the charge of bigotry, that time required for learning theoretical navigation is spent to better purpose in other directions, and that its utility is debatable; but the RECORD learns, from several unimpeachable sources, that there is a lamentable degree of ignorance among licensed officers in regard to the provisions of the White law. This cannot be frowned down as a salt water innovation, for it was prepared after careful discussion by lake masters and owners. The property of the owners is at great risk in the hands of a man unfamiliar with these rules, no matter how high his standing; for if his vessel got into trouble, and any litigation over insurance resulted, the policy would undoubtedly be vitiated if a rigid cross-examination upon the witness stand showed that the master was not familiar with the existing rules of the road, provisions regarding lights to be used when navigating, at anchor, etc. It would not matter much, in litigation of that sort, whether ignorance of any of these rules was the direct cause of the disaster or not, if the insurance company took care to offer in defense that the vessel was not properly manned according to the terms defined in the policy.

The lakes are yearly receiving more and more attention at the hands of legislating and regulating officials, and the time is not far off when these requirements will be very much more rigid than at present. Therefore the senior masters must take care in time that they are not prematurely forced upon the shelf by the fact that the younger masters are able to make a better showing in examinations than the men under whom they sailed before the mast.

UPON receipt of a full copy of Senator Frye's bill regarding changes in the steamboat inspection service, we find that the provision regarding bulkheads to which we objected in last week's issue limits the requirements to passenger steamers, a fact not stated in the synopsis of the bill which was given general circulation. This alters the situation considerably; but it means more stringency in rules allowing owners and their friends to take trips on the large lake freighters. Most of the steel boats have

heretofore taken out passenger licenses on this account, and have willingly stood the slight expense for extra equipment required; but the stipulation for bulkheads will revolutionize this, and render compliance with passenger regulations impossible.

THE movement lately started looking to the creation of a Department of Commerce, with a cabinet officer at its head, cannot be too warmly commended. The commerce of the United States, both inland and on salt and fresh water, has been allowed to suffer because its interests were in the hands of too many government departments. This has resulted in a confusing and inequitable state of affairs, and this state will grow rapidly worse until something is done to rectify it. The creation of a Department of Commerce seems the most practical way out of the difficulty, and a bright Secretary of Commerce could in six months' time perceive most of the grave defects of the present systems which would come under his authority, and could then make such recommendations to Congress as would secure legislation tending to bring order out of what now closely approaches chaos.

VESSEL TRANSFERS.

The most notable sale of the week was the transfer of the steamship Globe, built in 1895 by the Globe Iron Works Co., of Cleveland, on their own account, to Mr. John Gordon, of Buffalo, the price being \$185,000.

Record has been made at the Milwaukee custom office of a transfer of a one-half interest in the steamer Hilton by Fred C. Lorenz to E. B. Simpson for \$1,200, and the transfer of the same interest by E. B. Simpson to C. H. Ellis for a nominal consideration; also of the transfer of a two-thirds interest in the schooner Mary E. Packard by Gustave M. Johnson to Herman Schroeder and August Bahr, of Sheboygan, for a nominal consideration.

John Fitzpatrick, of Buffalo, has bought a controlling interest in the schooner Manitowoc.

Capt. Travis, who formerly sailed the tug Marinette, has bought a half interest in the tug North Muskegon and will command her.

J. H. Clauss, of Fremont, O., has sold the steamer W. B. Morley to C. T. Morley and others, of Marine City. The price is not given out. The Morley came out in 1892. She has a measurement of 1565 net tons, an A1* rating, and is valued in the Inland Floyds register at \$100,000.

A one-half interest in the steambarge Liberty has been sold by Cornelius Dennesen to H. Clark, of Green Bay, for \$1,000.

The Lake Michigan Car Transportation Co. (W. & M. Railroad) have purchased the tug E. G. Crosby from E. G. Crosby & Co. for about \$12,000. This tug will assist in the handling of the car barges at Peshtigo, and will do other harbor towing when not so engaged.

The Riesterer Bank syndicate, of Tonawanda, owners of the Unadilla, have bought the Pringle, Sweetheart and Harrison for \$45,000.

Manager George L. McCurdy, of the Lake Marine Department, Insurance Company of North America, whose main office is at Philadelphia, is distributing a circular which shows the books of the company to be in very attractive shape. The capital stock is \$3,000,000; reserve for re-insurance of unsettled losses and all other claims is \$4,465,657.04; surplus over all liabilities, \$2,022,016.49; total assets (cash value) \$9,487,673.53; surplus as regards policy holders, \$5,022,016.49. The North America is the oldest stock insurance company in America, having begun business as an association in 1732, and incorporated in 1794.

PROPOSED DEPARTMENT OF COMMERCE.

Senator Frye's bill providing for the creation of the Department of Commerce and Manufactures contemplates the transfer to this department from the treasury, of the live-saving service, the lighthouse board, the marine hospital service, the bureau of steamboat inspection, the bureau of navigation, the coast and geodetic survey and the bureau of statistics; also the bureau of statistics of the State Department, the two bureaus of statistics to be consolidated into one. The consular service is also transferred from the jurisdiction of the State Department to the proposed new department. It is provided that the department shall have general jurisdiction over the foreign and internal commerce of the United States, except in so far as it relates to the collection of the revenue and the administration of the customs and internal revenue laws.

NEWS AROUND THE LAKES.

DULUTH AND SUPERIOR.

AN INTERESTING STATEMENT OF THE SITUATION AT THE HEAD OF THE LAKES—DISCOVERIES OF COPPER AND COAL—VISIT OF RAILROAD AND STEAMBOAT MEN TO THE IRON RANGE—TWO SEASON CHARTERS REPORTED.

Special Correspondence to The Marine Record.

DULUTH, MINN., March 17, 1896.

There is little doing in grain charters for shipment on the opening of navigation as yet, and the rate is about stationary at three cents. Vesselmen would not be likely to accept less than this and as there is no demand for tonnage the market is extremely dull. It is generally believed that this market is oversold—that is, that more wheat has been bought than tonnage has been chartered. Of course it would be very difficult to prove this, as it would involve the confidence of practically every agent and shipper at the head of the lakes; but many people are inclined to believe that that state of things exist.

One element of weakness in the situation is that the ore people have been playing a waiting game nearly all winter. Since the movement on the close of navigation not enough has been done to tell just where they stand, hence it adds an element of doubt and therefor weakness to the situation. Another factor is the amount of unchartered tonnage at Chicago. At present, corn, instead of going to Chicago, is going south and is making an outlet to Atlantic ports. When navigation is open, however, it is believed that corn will again pour into that port and fill up this unchartered tonnage.

On the whole, while the situation is a bit hazy and not very certain, it is pretty safe to predict that opening rates will be higher than those now prevailing.

About one-half of the lumbermen engaged in logging operations in the Duluth district have suspended operations, and camps are being abandoned now almost daily. The Burlington Lumber Co. has put 8,000,000 feet of logs into the St. Croix, and suspended. David Dobbie's cut for the season will amount to about 27,000,000 feet. Two camps on the St. Croix have suspended after putting in 6,000,000 feet. The Musser-Sauntry Co. will suspend shortly after a very successful season, and the Croppy & Pennington Co. will follow suit in a few days after a cut of about 7,000,000 feet for the season.

For the first time in the history of Duluth, a shipment of lumber was made all rail from here to Cleveland last week. D. C. Thompson & Co., shipped 200,000 feet to Cleveland for the Cranberry Lumber Co. The shipment is really a sample, and will be followed by extensive shipments after the opening of navigation, if the quality is what is desired.

April 5 to April 20 seems to be the scope of opinion as to the date of the opening of navigation. It is believed that the head of the lakes will be open as soon as the Sault is.

Vesselmen will miss the tug races this year. Captains Singer and Inman, owners of the rival tug lines, have come to an understanding. The understanding is not an ironclad one however, and it is barely possible that there will be fun again before the season is over.

The Duluth & Iron Range Railroad's new tug for Two Harbors, will be named the Edna G., in honor of President Greatsinger's daughter. Capt. Joe Cox, of Duluth will command her and C. W. O'Brien will have charge of the engine room.

The Minnesota mine has now the largest stock pile known in its history. The exact amount of ore it contains is not known, but it is between 300,000 and 400,000 tons, a part of it left over from last year.

Copper has now been discovered, it is thought, in paying quantities, close to the city of Duluth, in fact, at the point where the city is building its new waterworks plant. Coal has been discovered near the Nett Lake Indian reservation, and while some people look upon the discovery with suspicion, the fact remains that the Great Northern Railway Co. is securing all the land it can in that vicinity. It is getting the land with script, and is paying \$50 more per acre for it that would have to be paid for good agricultural lands within a radius of 50 miles of where the coal is said to have been found.

A party of prominent railroad and steamship men were in Duluth last Saturday and left the same evening over the Duluth & Iron Range road to inspect the iron range, returning Sunday over the Duluth Missabe & Northern. The party was composed of H. B. Chamberlain, of Elmira, general freight agent of the Erie; W. H. Wetherell, of Cleveland, general agent for the same road; H. C. French, manager of the Union Transit Co., and Agent Tedord, of the same company, Chicago. They say that their trip has no significance further than that they wish to inspect the range.

The firm of Williams, Green & Williams has succeeded to the business of Daugherty & Upham, the contractors for river and harbor improvements. The new firm is composed of E. T. Williams, J. H. Green, T. H. Williams, C. E. and J. R. Williams. The firm has seven powerful dredges and a large fleet of tugs, scows, pumps and all apparatus required for marine work.

Work is being rushed on the four new whalebacks upon the stocks at the American Steel Barge Co.'s shipyard, to get them ready for launching by early spring. Preparations are being made at the company's dry-

dock for a large business, as this year there are more vessels laid up at the head of the lakes than ever before, and most of them will go into dock to be overhauled before commencing the season's work.

Singer's Tug Line will have eight tugs in commission the coming season, and Inman's Line will have 13 towing tugs in commission.

There is not much stock taken here in the provision made for the output of the Mesaba mines, made at a recent secret meeting in Cleveland. It is believed that if business will justify it, the mines will get out all the ore they can. Two boats have been chartered by one big shipper for the coming season. The rate is given out as \$1.10.

Two Harbors reports that the lake is practically clear of ice in that vicinity.

February was a very poor month as compared with every month since the coal movement began last fall, and was much poorer than a year ago. This was due to the fact that it was the warmest February in many years. The coal traffic handled by the railroads of the two cities amounted to 7,106 cars, as against 9,041 in January, 10,953 in December, 15,076 in November and 16,329 in October.

The annual effort to organize the coal handlers, in order that they may enforce demands for high wages, is now being made. Last summer the coal handlers of Superior tried to enforce their demands for higher wages by going on a strike, and then finding they were not as successful as they had expected to be, they interfered with the Duluth men, but were quickly stopped by the Duluth authorities. The failure of the strike was laid to lack of organization, and for this reason they are trying to organize a strong union. It is always in Superior that the trouble with coal handlers begins. However, the situation is different from what it was four or five years ago, and the men must be very strong to enforce their demands.

There is little doubt but that the British and Foreign syndicate will control the marine insurance business again this year. A conference between W. A. Prime, of New York, representing the British & Foreign Co.; C. W. Elphicke and J. J. Rardon, of Chicago; David Vance, of Milwaukee; F. R. Bigelow, of St. Paul, representing the old lake companies and local shippers, was held here Monday. Mr. Prime states that he has closed contracts on all the flour to be shipped from the head of the lakes this summer, but declines to say what rate has been made. This leaves only the grain to be underwritten, and the belief is general that the foreign syndicate has secured this business. ELLIS E. BEEBE.

BUFFALO.

INSOLVENCY OF THE BUFFALO FIRE AND MARINE UNDERWRITERS—CANAL MEN HAVE TWO ORGANIZATIONS—PURCHASE OF THE GLOBE.

Special Correspondence to The Marine Record.

BUFFALO, March 17, 1896.

Mr. John Gordon, who bought the Globe from the Globe Iron Works Co. last week, is rather reticent as to what disposition he will make of her, and says he will run her wild at any trade that offers. The purchase, being coincident with the announcement that it will be impossible for the Great Northern to absorb the Northern Pacific, it seems probable that a Buffalo-Duluth line which shall prove a formidable rival to the Hill fleet has not been abandoned.

The sale of the Pringle tow, which was actually consummated two weeks ago, is the most positive news of the week. The Pringle, Sweetheart and Harrison go to the Riesterer bank at Tonawanda for \$45,000, it is said. They were owned by Hollister, of Rochester, who still owns the Weed. It is expected that the tow will include the schooner Unadilla. The boats are good lumber carriers, but most of them are to old for much else.

The weather has joined the shippers in holding lake business back. There is not a peep of anything hatching here, and if the ice stays till the end of the month it may be the best thing for all concerned. A month ago it was supposed that there would be open water by this time, but the conditions have changed so that the predictions are laid out as cold as the lakes themselves. There never was anything so sure to go wrong, though, as a forecast of the spring opening of lake navigation.

A sensation has been created here by the official announcement of the insolvency of the new company known as the Buffalo Fire and Marine Underwriters. The company is a Lloyds and was a year old. With it was associated the Niagara company, which is of the same class. It appears that the Buffalo company has, in the short time it has been operated, issued 2,300 policies and covered \$3,500,000 worth of property, mostly lake vessels. It has collected over \$50,000 in premiums, some say twice that amount. There were twenty underwriters in the company, each liable for \$5,000, thus only \$100,000 being pledged to take care of these millions of dollars. The company was organized by Henry S. McFall and included as members the mayor and controller of the city. It is said that considerable ocean business was written, strange as that may seem.

It appears to have been a providential provision that Buffalo Fire and Marine Underwriters should go to pieces before the season opened. But for that there would be more people in trouble than there are now. Why anyone should tie up with any concern without knowing the inside workings is a wonder. Here were 35 per cent. of the premiums turned over to McFall, the

"attorney" of the company, and risks taken right and left at any rate that would secure the business. Whatever the management was or might be after that was what might be expected in a year when the most carefully managed companies lost heavily. Now we have the spectacle of this company confessing that it is hopelessly insolvent, with \$50,000 in premiums to show against about ten times that amount of losses. Too many people have imagined that insurance was insurance and that a low rate was all that need be looked out for.

The Crystal Beach Excursion Line has practically secured the steamer Garden City for use on its route this summer. She is a Canadian, but is of steel, and is said to be a better excursion boat than any owned here.

It sounded like May when the report came in that the schooner Adriatic had wet a lot of her wheat. The inspectors said at first that the amount would be 3,000 to 5,000 bushels, but it turned out to be 7,172 bushels. This is the first damage of the sort this winter. The Topeka and Sitka wet a few bushels of their flaxseed, but came out much better than was expected. The Adriatic is receiving new upper works forward, so there could have been no lack of care of her. As the water came through a sea pipe burst by the frost the loss falls on the underwriters.

There is some chance of a bridge to Grand Island in spite of the opposition of Niagara Falls. Buffalo generally favors the bridge, as it seems cruel to isolate a whole township any longer on a plea that a bridge on a quiet water would hinder the movement of a fleet so small as that which goes down the Niagara. The fact is that both Tonawanda and Niagara falls base their real opposition on the fact that the bridge would throw a large amount of real estate on the market.

The Buffalo dredgers are much disappointed over the continued cold weather. They expected to be at work by this time, but business is really further away than it was a month ago. Hingston & Woods sent a dredge up to the new bridge job from the Erie Basin Monday to help pull out the old piles, but there is no passage outside yet for dumping. And now a hitch has appeared in the assessment roll for the city blasting work in the inner harbor, which threatens to repeat the old abuse of holding the work back till the season is half gone. The Bugalo Dredging Co., which has the contract, is anxious to get as much of it done as possible before the big boats are in the way.

The board of inspectors of the lake fleet are complaining that the published reports of the changes of valuation made by them are not always correct. For instance, the steamer Nyanza is going the rounds as having been valued down from \$100,000 to \$75,000, but this appears to have been a misprint to begin with. She was reduced only \$5,000. The Kelderhouse fleet all goes up, the America \$10,000 and the Brazil and Maytham \$5,000 each.

There is about as little fitting out going on in the harbor as is ever the case at the middle of March. Ben Boutelle is down from Bay City to look after some work on the Sibley, but the winter fleet as a rule is still left to itself.

Coal shippers declare that the cold weather is having no visible effect on the demand for coal, and prices are not a bit better than they were when there was prospect of a mild winter. They admit that the cold snap will have some effect on the winter stocks, but that is all in the future. They will not say a word about spring rates.

The canal men have got together at last, and have two strong organizations. If there is any money in the business they are ready to capture it. Freight men say that though the cut rate on grain to Liverpool from Buffalo via Boston will bring a large amount of wheat here there is no cut in the rail rate to shut out the canal. It has all been made by the ocean lines, which ought to mean that they are carrying the grain for about nothing.

The Clover Leaf line to Toledo has chartered only the Blanchard yet, but is offered a dozen more from which to select the second one. JOHN CHAMBERLIN.

CHICAGO.

ACTION TAKEN BY THE BUSINESS MEN TO PREVENT NEGLECT OF CHICAGO RIVER FOR THE CALUMET.

Special Correspondence to The Marine Record.

CHICAGO, March 17, 1896.

Representatives of the leading commercial interests of Chicago met last Friday at the Great Northern Hotel to take action in connection with the threatened removal of navigation from the Chicago River to the Calumet River. The meeting was called by the Chicago River Improvement Association. About 125 gentlemen attended. They included railroad officials, board of trade men, leading manufacturers, and representatives of the lake marine trade.

The sense of the meeting was that the commercial supremacy of Chicago was in peril, and that decided action should be taken to prevent the abandonment of the river as an artery of commerce. Hon. George E. Adams presided. An address prepared by a sub-committee was adopted as the sense of the meeting. The address cites the fact that the association, representing large commercial and manufacturing interests, has asked Congress for \$700,000 to dredge Chicago River and its branches to 16 feet, between Belmont avenue on the North branch, and Western avenue, on the South branch. The appropriation was recommended by

(CONTINUED ON TENTH PAGE.)

CORRESPONDENCE.

We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

THE POINT PEELEE SHOALS.

To the Editor of The Marine Record.

In THE MARINE RECORD of March 5, I noticed a report of the Canadian Department of Hydrographic Survey of Lake Erie. Said report says: "At Point Pelee I delayed four days sounding and making inquiry about a new shoal reported to exist there. Could find none." Is it possible that our Canadian friends were hunting for said shoals through the neck of a bottle? I doubt if there is a captain of a deep draft boat in the Lake Erie trade but can locate the shoals reported. They are not wrecks, but are composed of hard sand or (soft?) rock and are three or more in number. They are about three miles SE $\frac{3}{4}$ E from (the Dummy) Point Pelee lighthouse. Five years ago they had about 17 feet of water over them and have considerable less now, as the water was high then.

The three shoals here spoken of cover a distance of about half a mile when on the above course, but can be avoided by keeping ESE after passing the Dummy at the usual distance off or by keeping well to the south.

I have heard very flattering reports of the survey made of Georgian Bay, but if the reported work of last fall is a criterion I would advise mariners who trade to Georgian Bay not to place too much confidence in said charts. The report also says: "One very dangerous new reef has been discovered lying about four miles south of Nanticoke and covered with only $7\frac{1}{2}$ feet of water." In the name of charity I ask where is Nanticoke? I claim to be very well acquainted with the north shore of Lake Erie, yet I have to admit that I don't know where said city, town, village, country or whatever it may be, is located. Neither can I find it on any chart. Now, that I have given the surveyors a pointer on the location of the shoal they could not find, it is only fair that they should give sailors a pointer as to the location of the new shoal they found.

MASTER MARINER.

Port Huron, March 16, 1896.

FISHERIES PROTECTION SERVICE.

To the Editor of The Marine Record:

The Fisheries Protection Service of the Dominion government, has grown to be of great importance and is worthy of careful consideration by Congress and the people of the United States.

Not many citizens are aware that the Dominion government has a fleet of armed cruisers, with crews drilled and uniformed. A navy in all but name.

In the past season this fleet was as follows: The steam cruisers Arcadia, Curlew, Petrel, Dolphin, Stanley, La Canadienne and Constance, and the armed schooners Kingfisher and Vigilant. Part of the season the new steamer Aberdeen was also in this service. The ships on the Pacific coast and the steamer Alert, which was in Hudson Bay early in the season, are not included in this list.

One of the best features of this service is its close connection with the marine department. The steamers of both branches are available in either. The marine department has six fine steamers, the Lansdowne, Druid, Bayfield, Newfield, Northern Light and Aberdeen. The Aberdeen of the marine branch was part of the season in the fisheries service, and the fisheries cruiser La Canadienne was part of the season in the lighthouse service. There were, therefore, in the entire department 13 screw steamers of from 70 to 785 tons, and two armed schooners.

This fleet was employed in various services wherever needed, from Newfoundland to Port Arthur. There is no restriction on their passage from lake to lake or from Lake Ontario to the sea. There is no restriction in the crews of those cruisers. The Constance class have as many men as gunboats of their tonnage carry. There is no restriction in their armaments. The Constance did mount seven rapid-fire guns. Some of the guns are left ashore, but it is understood that full armaments are provided ready to go on board when wanted.

There are some features of this service that are

worthy of imitation. On the Great Lakes and Upper St. Lawrence the American fisheries need just the protection that this service affords the Canadians.

The service performed by these cruisers is not so monotonous as the name indicates, but has some attractive variations from the ordinary work of confiscating American fisheries. The report of the captain of the Petrel for the season of 1895, tells of a campaign against the Detroit Sanitary Co., resulting in the capture of their tug and lighter and in sending the crews to jail. On another occasion the Petrel was left at Port Colborne, and the captain with an armed party drove to the Niagara River, captured another American tug and some scows and received the thanks of the municipalities and the personal approval of the Hon. Minister of Marine and Fisheries.

There is but one restriction imposed on this service, the name. The treaty of 1817 compels Commander Dunn to head his official reports "Dominion Cruiser Petrel" instead of "Her Britannic Majesty's Ship Petrel." But if any one doubts that the Petrel is a ram-gunboat, not only designed by the Admiralty for special service in the Welland Canal, but is as much a man-of-war as the Michigan, the report of the commander should convince him. In this report he speaks of having the crew measured for their uniforms when the ship went into commission; of firing a royal salute on the Queen's birthday; of taking armed parties on various expeditions on shore; and at the end of the season of having the crew inspected by the Commander-in-Chief, who complimented Captain Dunham on the drill of the men, who had been under a course of instruction.

The power and authority vested in the captains of these cruisers is greatly in excess of that employed by officers of the British Navy or of the United States Navy. Ten of the captains are also fishery officers, with power of a justice of peace. Some acts would indicate authority, not only exceeding that of a naval officer, but even that of a Canadian justice of the peace. Nets are seized, nets burned, nets sold, fines imposed, remitted or collected all at the sole discretion of these captains. The captain of the Dolphin, who patrolled Lake Ontario last season, says: "On the 12th of November I sighted a man in a skiff trolling; I gave chase, but it was not until three shots from the rifle had been fired that he stopped, and at my request came along side. I found three trout in the boat; I confiscated the skiff and fined him \$5." Suppose the three shots from the Dolphin had killed the fisherman, would it not be a severe punishment for catching three trout in Lake Ontario?

Having in view the bill now before Congress, providing for the organization of National Naval Volunteers for the protection of the Great Lakes and to provide men for the United States Navy, I wish to quote the closing sentence of the report of the chief commander of the fishery fleet: "The men are splendid, and as I have before pointed out, make the best sailors in the world, and if it were possible to arrive at some scheme by which the men could go through a course of drill in the winter time, I am sure it would be invaluable for us to have these men to fall back upon in time of dire necessity."

Considering that Canada has such a navy, free to come into any lake—considering that the navy of the United States is barred from the lakes—considering that the treaty of 1817 forbids building any naval vessel in the lake shipyard—considering these facts, what can we do? Can we do anything to defend ourselves?

If the American people could be brought to realize the conditions that exist, much could be done in a very few weeks. The six month's notice of intention to abrogate the treaty of 1817 should be given at once. This bill should be passed at once and the naval volunteers enrolled without delay. The Parrot rifles should be sent to the lake cities and mounted on floating batteries. Every lake shipyard could be given a contract for torpedo boats. Twenty good torpedo boats could be built in four months and, if necessary, they could be called fisheries protection cruisers until the treaty notice expired.

If this was done without "jingo" talk or such threats as the Canadian papers indulge in, it would be truly a peace measure. It is virtually inviting war to allow England to go on, year after year, fortifying the frontier, creating a Canadian navy, re-organizing and arming the militia, building an immense number of

men-of-war especially suited for a lake invasion, and constructing military roads and canals.

I close with a remark made by one of our best informed officers. Speaking of the leaders of the nation, he says: "This stagnation of long peace has caused a veil to grow between their usually clear brains and the signs of the times which surround. Nothing can help this but war itself. No scare can make them believe, in their present state, that peace conditions are trembling and about to disappear. Men must be killed and towns burned and ships sunk, before they can realize that war is at hand."

IRA HARRIS.

West Superior, March 16, 1896.

GENERAL DUMONT'S REPORT.

THE RECORD is in receipt of the annual report of the Supervising Inspector General of the Steamboat Inspection Service, for the year ended June 30, 1895. The total number of steamers inspected was 8,512, with a net tonnage of 2,196,298.62, 281 of these being foreign steamers, with a net tonnage of 357,262.23. Inspection on the lake was as follows:

Supervising District.	Local District.	Foreign Steamers		Domestic Steamers.	
		No.	Net tonnage.	No.	Net tonnage.
Fifth	Duluth	4	220.57	204	51,238.12
Eighth	Detroit	4	1,466.92	163	48,390.68
"	Chicago			247	113,345.28
"	Grand Haven			211	20,689.35
"	Marquette	1	134.45	113	6,724.41
"	Port Huron	3	2,778.84	200	47,915.96
"	Milwaukee			250	69,620.22
Ninth	Buffalo	18	11,365.23	341	138,156.34
"	Oswego	17	2,972.03	134	28,249.02
"	Cleveland	4	1,711.59	316	160,734.85
Total		51	20,649.63	2,179	680,404.23

Reports of supervising inspectors for the year were as follows:

Supervising District.	Local District.	Built.		Out of Service.	
		No.	Net tonnage.	No.	Net tonnage.
Fifth	Duluth	14	273.79	5	372.01
Eighth	Detroit	10	2,541.69	1	2.50
"	Chicago	13	2,829.70		
"	Grand Haven	17	968.54	4	980.18
"	Marquette	2	22.52		
"	Port Huron	17	621.21	1	2.00
"	Milwaukee	17	7,144.31	2	1,442.56
Ninth	Buffalo	25	490.05	1	2.00
"	Oswego	3	139.23	3	111.39
"	Cleveland	11	6,655.10	4	104.58
Total		129	21,696.14	21	3,017.22

MADE A JURY PROPELLER.

There are several instances on record of mending a broken shaft at sea, but few of making a new propeller. Yet that is what the chief engineer of the steamer Strathnevis had nearly accomplished when she was taken in tow after having been a month helplessly adrift on the Pacific. This propeller was constructed by heating iron sheets, cutting them to the right measurements and hammering them into the proper shape. It had a length from tip to tip of seven feet six inches, and by bolting the sheets together he obtained a thickness of from one-half inch at the tip to three inches at the boss. Straps were bolted from tip to tip to hold the blades rigid, and holes were bored through the boss. Had any favorable weather occurred it was the intention to shift the cargo sufficiently to tip the ship and bolt this ingenious contrivance to the shaft, and there is no doubt that its use would have given the ship a speed of from three to five knots.

COST OF THE KIEL CANAL.

It is definitely stated that the cost of the Kiel Canal has reached the sum of \$39,000,000. It is about 61 miles long, 20 feet deep at dead low water, and 229 feet wide, in numerous places the width increasing to some 428 feet, to allow the largest vessels to pass each other, and work will be continued until vessels of any depth can pass at low water. The embankment is stone lined to a depth of six feet below the water, and the locks at the North Sea end of the canal are said to be the largest in the world, with the exception of that at Bremerhaven. The bridges span it at a height of 137 feet above the water, and there are also six opening bridges and 16 ferries.

The bill providing for regulation of Sault navigation by the government is now a law.

ELECTRICALLY DRIVEN PUNCHING MACHINES.

Craig & Donald, engineers, Johnstone, Eng., have recently supplied to Messrs. Denny & Brothers, Dumbarton, a very powerful punching machine of the cam-lever type, driven by an electric motor, which we have pleasure in illustrating. The machine is arranged at each end to punch two holes at a time, but as each punch is provided with an independent stop motion, either may be thrown out of action instantly. This arrangement is found advantageous when a plate has to be punched with more than one diameter of holes; as the required diameter of punches can be fixed in the machine before starting to punch, and the plate can be punched without interruption. This machine is equal to punching two holes at a time (at each end) 1 inch in diameter through 1 inch thickness of steel 42 inches from the edge of the plate; or one hole of 1½ inches diameter through 1½ inches thickness of steel. It is arranged with side cutter to cut the notches in stringer plates up to 10 inches by 8 inches through ¾ inch thickness.

The motor driving the machine is of 18 brake horsepower, and runs at a speed of 700 revolutions per minute. The camshaft and all gearing are of steel, except the large wheel on the camshaft. The machine has brackets arranged for carrying two cranes.

The use of electric motor drilling machines for drilling holes in the shell and deck plating of ships has been considerably developed within the past six months in the royal dockyards, and the application of the system to the exigencies of war-ship construction is likely to affect, in a very material degree, the rate of speed at which vessels may be completed. Electric drillers have also, of course, been employed for some considerable time in private yards on the Clyde and elsewhere. An electro-magnetic drill was introduced into some of the larger Clyde yards several years ago, by means of which holes could be drilled through plates fitted in position on the ship in a mere tithe of the time taken by the old clumsy system of drilling with the ordinary brace and ratchet drill. By the force of magnetism this tool was made to cling to the side of the vessel while doing its work. For some reason or other, however, its use has not been extended, but rather curtailed of late, and machine tools adopted which require to be "held up" to their work, the requisite purchase to press the drill home being obtained from fixed staging or other erections alongside. This difficulty in regard to purchase has been satisfactorily overcome by one of the dockyard electricians, who has availed himself anew of the electro-magnetic principle. A portion of the electric current from the generating dynamo is diverted to powerful electro-magnets attached to the electric motor, and by making the body of the vessel itself earth, the motor is made to cling to the deck or ship's side with such tenacity that the drilling tool works away just as though it had a tightening screw at its back, only much more steadily.

The magnets are short stumpy legs, three in number, each leg being an independent magnet having a positive and negative pole. Until recently only two magnet legs were employed, one being positive and the other negative. It was found that with only two magnet legs the purchase secured was unsteady, the electric motor vibrating and wobbling a good deal, the drilling in consequence being unsatisfactory. The adoption of the three legs, each having the two poles complete in itself, gives a perfectly steady working tool. When required to work, a small handle is turned which switches on the current, making the magnets adhere to the plate required to be pierced. Another small handle switches the current on to the drill, which starts at once. The drill is stopped and the motor detached with similar ease. For drilling holes in the vertical wall of a ship outside, the motor, with magnets, is suspended from a pole alongside, a rope being merely passed over the pole to support it. The motor is pulled along the pole with a pulley and another rope as the work advances. Electric drills of this, or it may be some still more improved type, have undoubtedly a most important future. With the adoption of the tripod electro-magnetic contact, not only drilling but slotting and planing may yet be accomplished on the plates as fitted in position in the hulls of ships.

TRADE AND INDUSTRIAL NOTES.

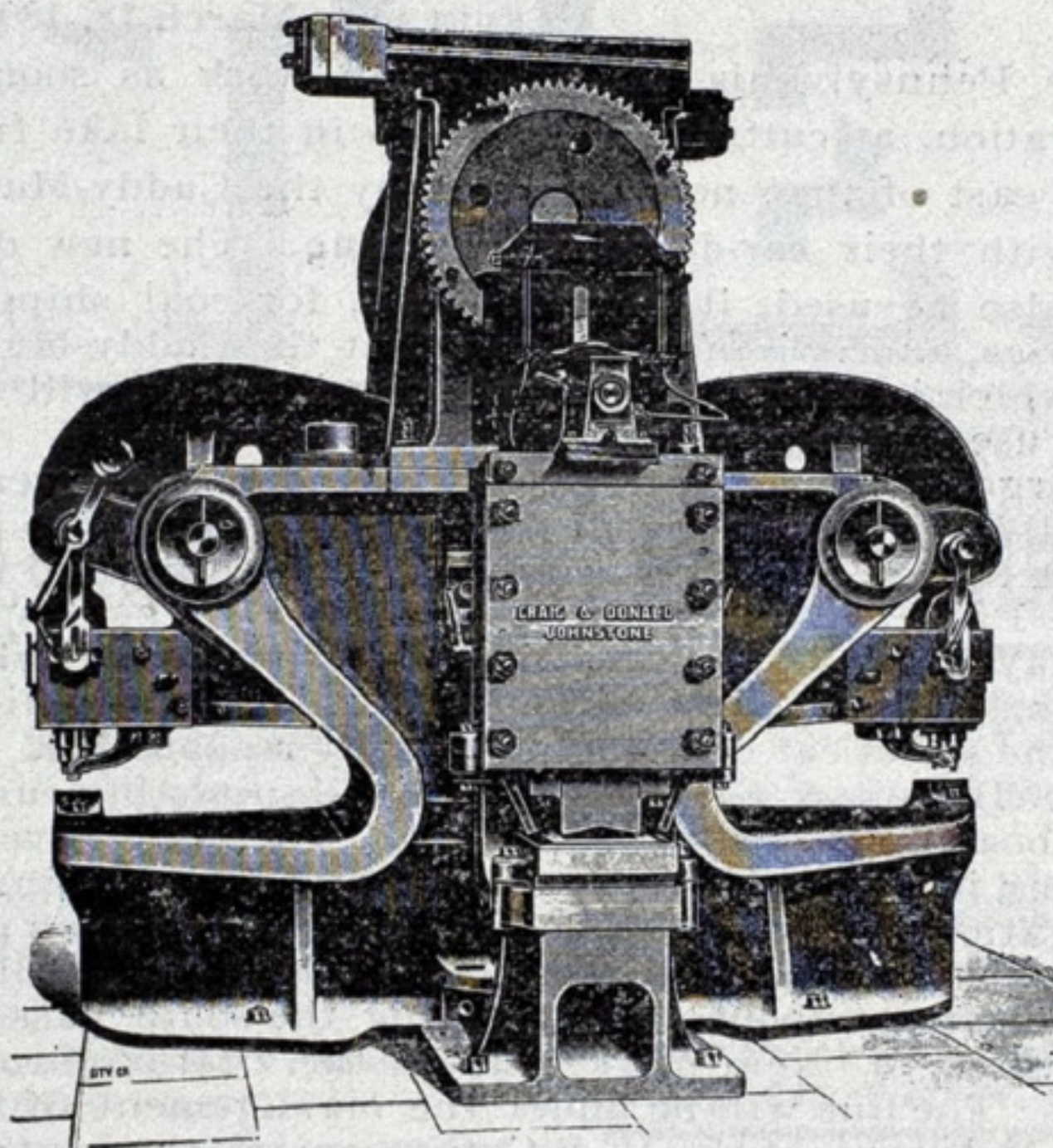
A representative of THE RECORD had the pleasure of a short chat, a few days since, with the oldest ship

chandler on the chain of lakes, in the person of M. I. Wilcox, of Toledo. Mr. Wilcox, while past the prime of life, is still rugged and hearty, and one of the most active of Toledo's business men. He is chiefly engaged at present in looking after the affairs of the Merchants' National Bank, of which he is president, the business of the M. I. Wilcox Cordage and Supply Co., 210-216 Water street, being directed by Manager H. E. Rouse, who has been seriously ill with la grippe for a month past.

A decree has been entered in connection with the reorganization of the Bucyrus Steam Shovel and Dredge Co., of South Milwaukee, approving the undisputed claims filed with the court, ordering a sale of all the property of the company and authorizing holders of first mortgage bonds and unsecured claims to use these in its purchase. The exact date of sale has not yet been fixed, but it is expected to take place about March 20.

At the December meeting of the New York Railroad Club the subject of the cause of detention was discussed. Forty-five per cent of the delays were due to hot journals, according to a table prepared by C. M. Mendenhall. It was stated that there is no solution offered for the prevention of excessive friction that is looked upon so favorably as Dixon's especially prepared pure flake graphite.

John Mohr & Son, Chicago, are rebuilding their South Chicago works with the intention of securing one of the best equipped boiler-making plants in the country. The equipment will consist of the most modern appliances for handling heavy work, including heavy

**ELECTRIC PUNCHING MACHINE.**

traveling cranes, very large shears and punches, hydraulic riveters, etc. The machinery will be driven by independent electric motors.

The Crane Co., Chicago, report a demand for standard pressure valves and fittings, and an extremely heavy demand for their high pressure gate valves, pop safety valves and metallic disc valves. They are at present making in solid bronze a number of 5-inch extra heavy gate valves weighing 400 pounds each, for a Massachusetts cotton mill.

The King Bridge Co., of Cleveland, have closed a contract with the Pittsburg & Conneaut Dock Co., whereby extension will be made in the plant at Conneaut. Four of the King hoisting and conveying machines for loading ore and coal have been contracted for and they will be completed June 1.

In the general complaint of slack orders and slow collections, it is refreshing to note that Bassett, Presley & Train, Cleveland, report a rush of work and prompt payments on the part of their customers.

The King Iron Bridge Co., of Cleveland, has been awarded the contract for the construction and superstructure of a 198-foot draw span over the Rouge at Springwells, Detroit.

Cleveland will soon ask for bids on an iron swing bridge 300 feet long for Willow street, and the lake county commissioners for a bridge across Grand River, at Painesville.

Foote, Barker & Co., of Cleveland, manufacturers of machine tools, say that they are finding business better than ever before.

THE LIBRARY TABLE.

We are in receipt of the year's book, for 1896, of Sandusky Branch, No. 48, M. E. B. A. The book shows that this branch, while not as large as some of the others, is second to none in point of energy. It is full of well-selected reading matter and remunerative advertisements.

The Yale Scientific Monthly contains another article of wide interest from the pen of Mr. Henry S. Pickands, upon "The Control of Lake Levels." It is a succinct explanation of existing conditions and current theories. In addition there is a scholarly discussion of the Roentgen discovery, fast railway running, electric welding, etc.

Prof. John Trowbridge, of Harvard University, was the first man in the United States to make a successful photograph by Roentgen's method. He has written for the April Scribner's a very graphic account, in popular language, of this wonderful discovery, and he illustrates it with a number of his own most successful experiments. He also will announce in the article an important discovery in regard to locating the exact depth at which a bullet is imbedded in human flesh.

The initial issue, Northwestern Miner and Marine Review, comes out under date of March 10. It is chiefly devoted to the mining interests in Minnesota, with a smaller proportion of its space devoted to the marine interests at the head of the lakes. The two interests are so interwoven that the combination bids fair to make a bright and interesting magazine. We wish the new publication much success.

A few weeks ago Mr. Stanton, of Smith & Stanton, the popular publishers of Seaboard, came to the Great Lakes with his camera and made a trip to the various shipyards. As a result, the leading article in last week's issue of Seaboard was devoted to lake shipbuilding, and besides being profusely illustrated with views of the new tonnage, contains a table which includes the tonnage under construction all along the American side, the value of which, according to Seaboard's figures is \$9,197,000.

The March issue of The Rudder contains a leading article and a number of illustrations to Lake Erie yachting matters and to the Cleveland Yacht Club, the latter's handsome club house being the subject of a well executed supplement. Portraits of the officers of the C. Y. C., as well as pictures of the steam yachts Peerless and Say When, and the crack racing and cruising yachts Priscilla, Commodore Gardner, Neva, White Wing and Mona; also the ball room of the club. Those wishing copies of this number should write to The Rudder, 55 Broadway, New York, enclosing 20 cents.

The April number of Harper's Magazine will contain the concluding chapters of "Personal Recollections of Joan of Arc," showing the maid and conqueror as at last the martyr. "Mad Anthony Wayne's Victory," by Hon. Theo. Roosevelt, is a bright contrast to the same author's recent account of the disastrous defeat of St. Clair. Another of Caspar W. Whitney's papers on "The Barren Grounds of Canada;" the continuation of Poultney Bigelow's story of "The German Struggle for Liberty;" interesting reminiscences of "Lowell in London;" and choice short and serial fiction contributions make up a most attractive number.

ACHIEVED MODERATE SUCCESS.

Capt. W. S. Mack and Capt. George P. McKay, of Cleveland, who visited Ottawa as delegates from the Lake Carriers' Association, did not have much success in fighting the Detroit bridge bill on the Canadian side of the lakes; but they met with a favorable response regarding other requests which they were instructed to make by the Lake Carriers at their annual meeting. Sir John Costigan, Minister of Marine and Fisheries, after consultation with William P. Anderson, chief engineer of the department, agreed to move Point Pelee life-saving station from the southwest side of Pelee Island to the mainland. He also agreed to provide gas buoys for the middle ground between Point Pelee and the island, and for the shoals southwest of the point, where so many boats touched last season. The Canadians have no gas depot nor tender, and the buoys will have to be looked after by the United States or at private expense. Col. Anderson has instructed Capt. Andrew Hackett, light keeper at Bois Blanc Island, to properly stake the cut at Bar Point for the new channel, which is to be 800 feet wide, as soon as the channel is completed. This will be about the middle of April.

(CONTINUED FROM SEVENTH PAGE.)

CHICAGO.

Major Marshall in 1893. "We should not deem it necessary," says the address, "to make any further appeal on behalf of Chicago River, had not Major Marshall, in his report on the Calumet River and Harbor, dated Feb. 21, 1896, recommended large appropriations there on the ground that the Calumet River is destined to become the principal harbor of Chicago, and that the Chicago River cannot economically be made navigable for the large vessels now coming into use on the lakes."

While cordially approving of the proposed improvement of the Calumet, the address states that the lake commerce of Chicago is bound to grow to a volume which will tax the capacity of both rivers, and that Chicago River must eventually be improved in any event.

The new harbor might be built for half the cost of improving the old one, and yet the total or partial abandonment of the old harbor for the new might involve an annual loss to national commerce for exceeding the sum necessary for the development of both. The outer harbor, including the breakwater, cost \$2,000,000. The inner harbor has a channel 12 miles long with a dock frontage, including slips of over 40 miles, nearly all of which is in actual commercial use. The railways have a frontage of 12 miles, and the coal docks of over 2 miles. Representatives of the railways declare that it would be practically impossible to transfer these terminals to the Calumet. The switching charges to and from the Calumet are \$3 per car, which if paid on the aggregate traffic now brought to Chicago by these railways for shipment by lake would far exceed the sum needed to improve Chicago River to meet the largest demands of lake navigation. This would have the effect of driving much of the traffic away from Chicago altogether. Grain elevators on the Chicago River have a capacity of 40,000,000 and those on the Calumet 8,000,000 bushels. To make the elevator capacity of Smith Chicago equal that of the old port would require an expenditure of at least \$6,000,000.

James Corrigan, of Cleveland, was in the city Friday and Capt. William Mack on Monday.

Capt. John Hutton, of the steamer A. A. Parker, arrived here Monday.

James W. Callick & Co. chartered the steamer Madagascar for 66,000 bushels of corn for Port Huron at 1½c. Carr & Blair chartered the schooner W. D. Becker for corn to Buffalo at 1½c. The steamer S. R. Kirby was chartered for 100,000 bushels of corn to Buffalo at 1½c.

The Dunham Towing Company towed the steamer Schuykill to Miller Brothers' dry-dock; the steamer Scranton to 12th street; the schooner W. D. Becker and the steamers Governor Smith and W. J. Averill to the Iowa Elevator; the steamer H. R. James to the Helena and Central elevators.

Engineers William Lynett and Tom Hunter have purchased the small steamer Uncle Charley and intend to run her as a supply boat on Chicago River, for conveying milk, ice, provisions, etc. to vessels in the river.

The members of the American Association of Masters and Pilots will give their first annual grand reception and ball on Wednesday evening, April 8, at the Medinah Hall, corner Jackson street and Fifth ave. They hope to have all the Masters, Pilots, and other officers and vesselmen and their friends attend, and give them a good start on their trial trip.

Capt. Louis Hohmann has purchased the tug James Hay from the Fitley Sand Co. for \$3,500. Captain Hohmann's tug A. S. Allen was taken in part payment.

The U. S. local inspectors of hulls and boilers are busy with steamers and tugs, 17 of which have been inspected up to March 17.

The American Association of Masters and Pilots, at their regular voyage last Thursday afternoon, initiated six new members. At an adjourned voyage held Saturday evening two more new members were initiated.

THOMAS WILLIAMS.

PORT HURON.

NORTHERLY WINDS STILL KEEP THE ICE BLOCKED AT THE FOOT OF LAKE HURON—CASE OF SMALL POX.

Special Correspondence to The Marine Record.

PORT HURON, March 17.

M. E. B. A. No. 43 has just issued its annual directory. It eclipses all former editions.

The new tug building for Loud & Sons will be one of the strongest built tugs ever turned out. She has a 14 x ¾-inch steel chord around her and is diagonal strapped with 6 x ¾-inch steel. The builders are using the very best of second growth oak.

Work on the Britannic is being pushed with a big gang of men, to have her ready for the opening of navigation.

The Port Huron Ferry Co. will run two boats to Stag Island during the coming season. For this purpose the steamer J. C. Clark will be put in commission. She is to be entirely rebuilt and with her twin steamer, the Hiawatha, will make eight regular trips every day, commencing at 8:30 a. m., and special trips when required.

The case of Capt. William Hagan, of Marine City, who was found to be ill with smallpox on Monday, has caused much excitement in that city. Capt. Hagan had been visited by many citizens previous to the development of the disease. Capt. Hagan had been appointed to the steamer Michigan, and will be all right to go out

on her when she is ready to sail. He is up and around now.

There is plenty of ice at the foot of Lake Huron. The wind has continued north and northwest for two weeks and keeps it all at this end of the lake. We will make a report each week but if any one wishes to know more about it, let us know and we will notify him as often as he desires.

KENDALL MARINE REPORTING CO.

KINGSTON.

WATER RISING ON LAKE ONTARIO—AN EARLY OPENING EXPECTED.

Special Correspondence to The Marine Record.

KINGSTON, March 17.

The mild weather is making the shipowners restless, and they begin to talk of fitting out. Reports from different directions indicate an early opening. There is quite a stretch of clear water to be seen inside Nine Mile Point, and around Horseshoe Island, at the southern end of the Batteau channel.

Sailors are looking forward to a better depth of water next season. Since the lake became frozen over last fall the water has risen 14 inches, and it is thought that it will still rise 15 to 20 inches more if any quantity of rain falls. High winds have prevailed for several days, and this has had a tendency to weaken the ice block.

Booth & Co. have chartered the schooner Wawanosh for the season to carry timber from Toledo to Garden Island.

Gunn's wharf at the foot of William street is receiving extensive repairs.

CLEVELAND.

THE PENNSYLVANIA WILL BUILD MORE DOCKS ON THE LAKE FRONT—OPENING OF NAVIGATION BY PASSENGER LINES.

CLEVELAND, March 18, 1896.

The Pennsylvania Co. will begin work as soon as navigation, at cutting another slip in their lake front dock, east of that now occupied by the Cuddy-Mullen Co. with their car-dumping machine. The new dock will also be used, it is understood, for coal shipping purposes, and it is not unlikely that the Cuddy-Mullen Co., which is enlarging its trade considerably, will also make use of the new dock.

George W. Mason, of No. 38 Commonwealth avenue, a well-known lake engineer, and appointed to the Griffin for the coming season, was so badly injured by a Wade Park avenue motor, that he died at the hospital Monday night. Mr. Mason was very popular where known, and the circumstances of his death indicate that the street car company is entirely responsible.

The Detroit & Cleveland Line will probably run its first boat down about April 28th. The ice above the Dummy is reported still very hard, and the opening of navigation is likely to be delayed more than seems generally anticipated. The Cleveland-Toledo Line will begin operations about April 1, taking the south passage. The State of New York will be the first boat on the route. The line will be under the management of Mr. D. C. McIntyre, of the D. & C. Co., one of the boats belonging to the Cleveland & Buffalo Line, and the other to the Detroit & Cleveland Line.

The Cleveland Dredge Co. was incorporated this week with \$50,000 capital. The personnel is that of the Vessel Owners' and Ashtabula towing companies, and the officers will also administer the affairs of the new company.

REPAIR NOTES.

The schooner Delaware has been having some calking done at Gilmore's dry-dock, Toledo.

Ives Bros., of Sturgeon Bay, are making some extensive repairs on the engine of the Seymour.

Three light spars to carry short topmasts have been stepped in the schooner Scotia at Milwaukee. She received a topside rebuild at the south yard during the winter months.

S. D. Gilkey, of West Bay City, who has made a tour of the eastern shipyards expecting to see something new and modern, says that he found them at least twenty years behind the lake snipyards in methods of work, in equipment and in everything which goes to make up a shipyard. He excepts the government yards at Brooklyn and Newport News.

The naval appropriation bill for the next fiscal year will provide for four battle-ships to cost \$3,750,000 each and fifteen torpedo boats, five to cost \$8,500,000 and ten to cost \$800,000 each.

A BILL introduced by Representative Walsh (H. R. 6615) appropriates \$200,000 for the construction of a torpedo boat destroyer after plans covered in the patent of R. B. Painton, relative to propulsion and operation by a combination of steam and electric power.

SHIP BUILDING AND REPAIRS.

THE NEW CROP.

There is little new in shipbuilding circles now except the vessels, a number of which are rapidly nearing completion. The W. D. Rees, at the Cleveland shipyard, is probably the first, as the time necessary to give her a final coat of paint will see her finished. The Queen City, at the same yard, has made most remarkable progress considering the fact that the time spent on her has been the equivalent of 48 days' work. She is drawn much finer than most of the latter day freight ships, her bows being quite sharp. The Duluth & Iron Range tug Edna G. will be ready for launching in two weeks. The 17 feet beam of her original design has swelled to 23 feet, and she will be a high-power yacht, more than a tug. Notwithstanding her rich finish, she will be useful as well as ornamental.

Work is proceeding rapidly on the Mutual liner Coralia at the Globe yard, and the ships for the Bessemer Steamship Co. are making good progress. The revenue cutter Carlisle will not be completed by May 1, owing to time lost in changes of the original contract designs, in waiting for material, and by inclement weather. She is well along, however, and will be out before summer comes.

The steamer City of Bangor, building for Eddy Bros. at F. W. Wheeler & Co.'s yard, West Bay City, will probably be launched Saturday, if the weather is favorable. The launch will be a quiet one, without special ceremonies. The Whitney ship is nearly all plated. She will be named the E. W. Oglebay, in honor of the senior member of the well known ore and dock firm of Oglebay, Norton & Co., and is honored in bearing the name.

Reports from Chicago, Buffalo and West Superior are that work is being pushed on all the boats as fast as weather will permit, and that they will all be out in good time. This is also true of the Detroit yards. The City of Buffalo will be delivered to her owners during the first in May.

At the Chicago Ship Building Co.'s shipyard the large steel schooner George Hartnell is nearly ready for launching. The steel steamer George N. Orr will be ready for launching some time next month.

A very fine tug was launched Monday afternoon at South Chicago and was named the T. C. Lutz. She is owned by the Hansler & Dunham Towing Co. Her dimensions are 95 feet over all, 20 feet beam, 11½ feet depth of hold. She will have a fore and aft compound engine with cylinders 18 and 36 diameter and 30 inches stroke, and a marine boiler 14 feet long by 9½ feet diameter, and a steam steerer. She is a handsome, strong and well built boat, and will be one of the largest and most powerful harbor tugs on the lakes.

GENERAL REPAIR WORK.

CLEVELAND.—There has been considerable good working weather this week, and the yards and docks have been taking advantage of it. The Forest City is in the Cleveland dry-dock for entire recalking, and the schooner Golden Age is in the Ship Owners' dry-dock for bottom calking.

CHICAGO.—At Miller Brothers' shipyard the Anchor liner Schuykill is in dock for repairs to her stern bearing and some new wale strakes forward. The tug James Hart is in dock for a new shoe, and the steamer Uncle Charley for general repairs and fastening wheel.

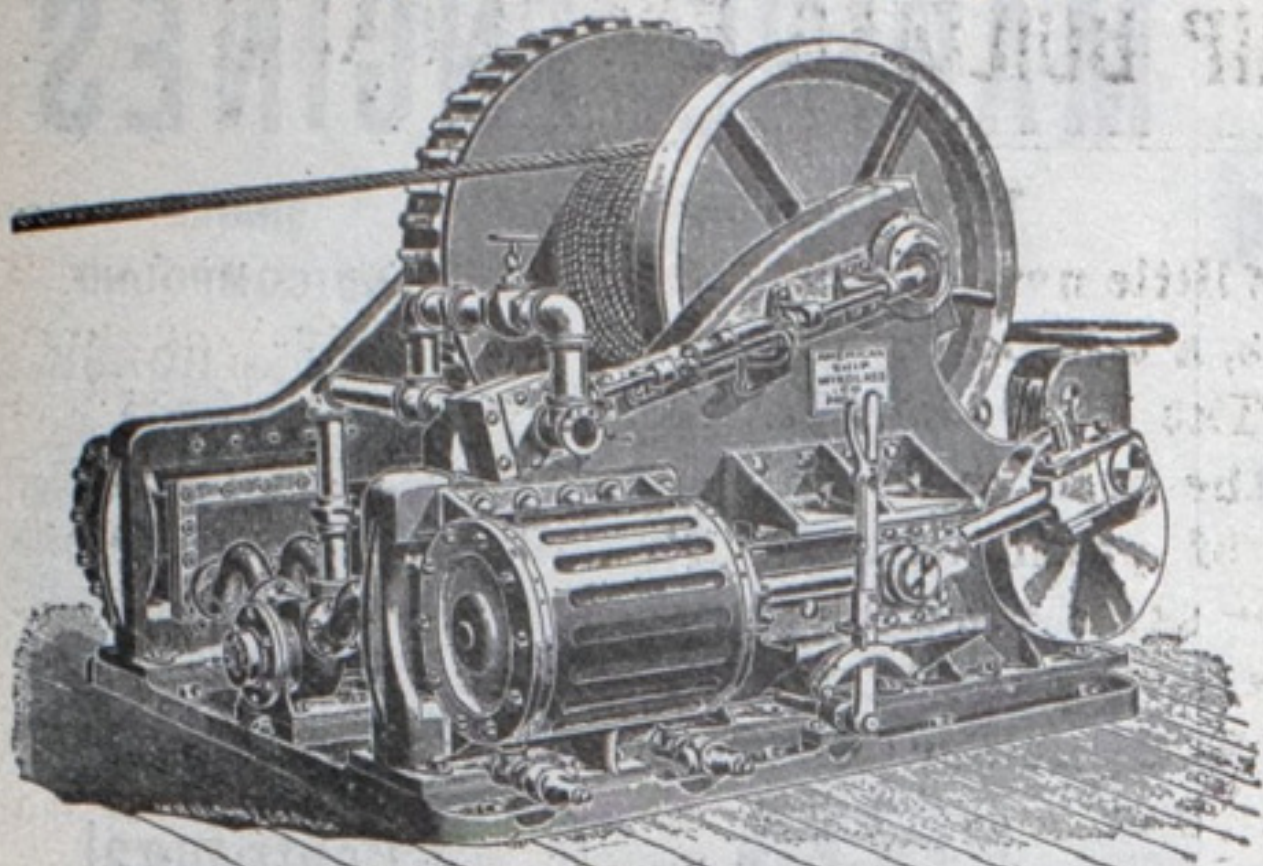
The Western Transit Co.'s transfer steamer McCormick is receiving new deck frames and decks, also new pilot house, boiler house and engine room and other repairs at Dunham's shipyard.

The schooner Resumption is to receive all new stanchions, stringers, planksheer, covering-board, bulwarks and rail. The work is being done by Captain Oscar Clow, under the superintendence of Captain Wm. Walsh.

MANISTEE.—The steamer Charles Reitz is on the float ing dry-dock at R. Thorsen's shipyard, and has been receiving a new stern from the keel up, new stern post dead wood, pipe, log for stern pipe, new frames and ceiling, new bottom plank from aft running forward a distance of 80 feet, new stanchions, stringers, covering-board, bulwarks and main rail, new deck beams and decks, three strakes of outside plank on topsides, and refastening and recalking. The material used is of the best white oak. The work is drawing near completion and has been done under the supervision of Captain David Curran, Jr.

W.

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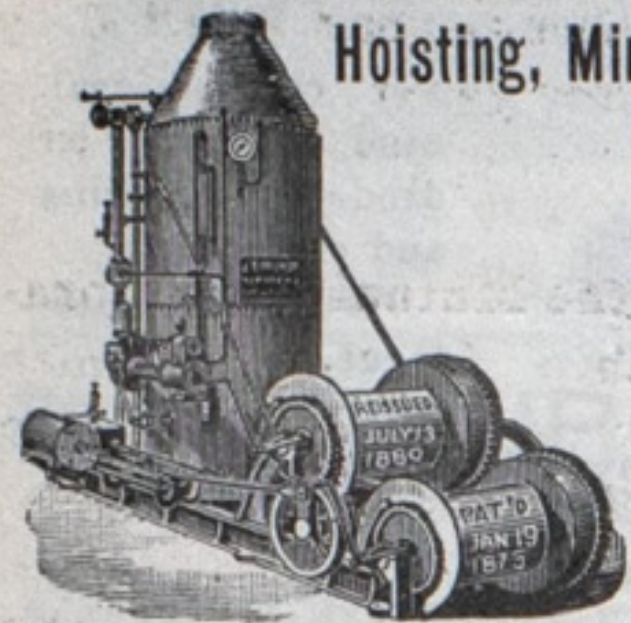
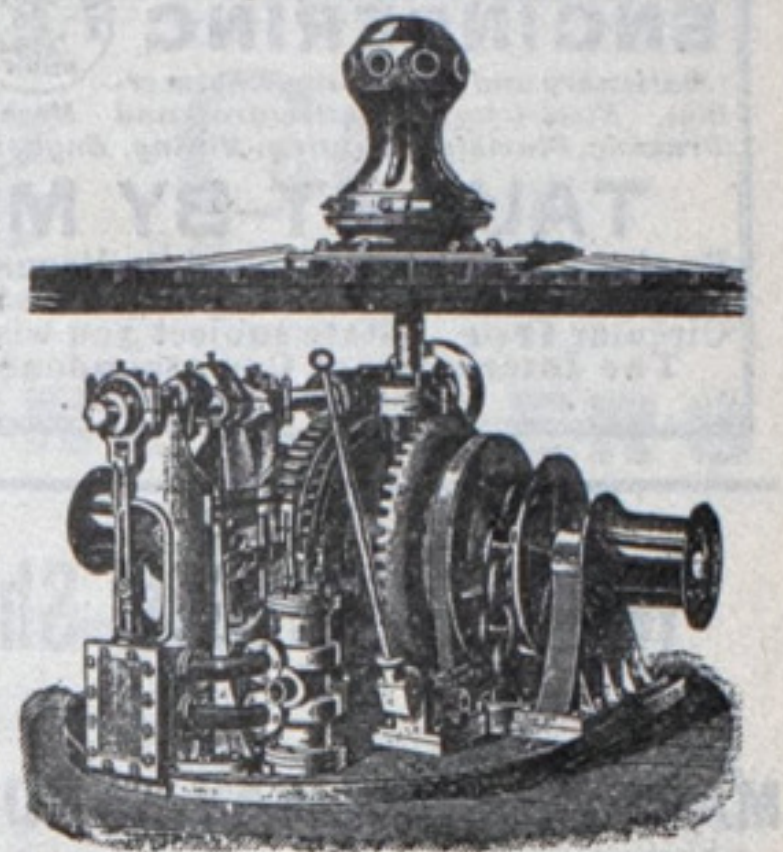
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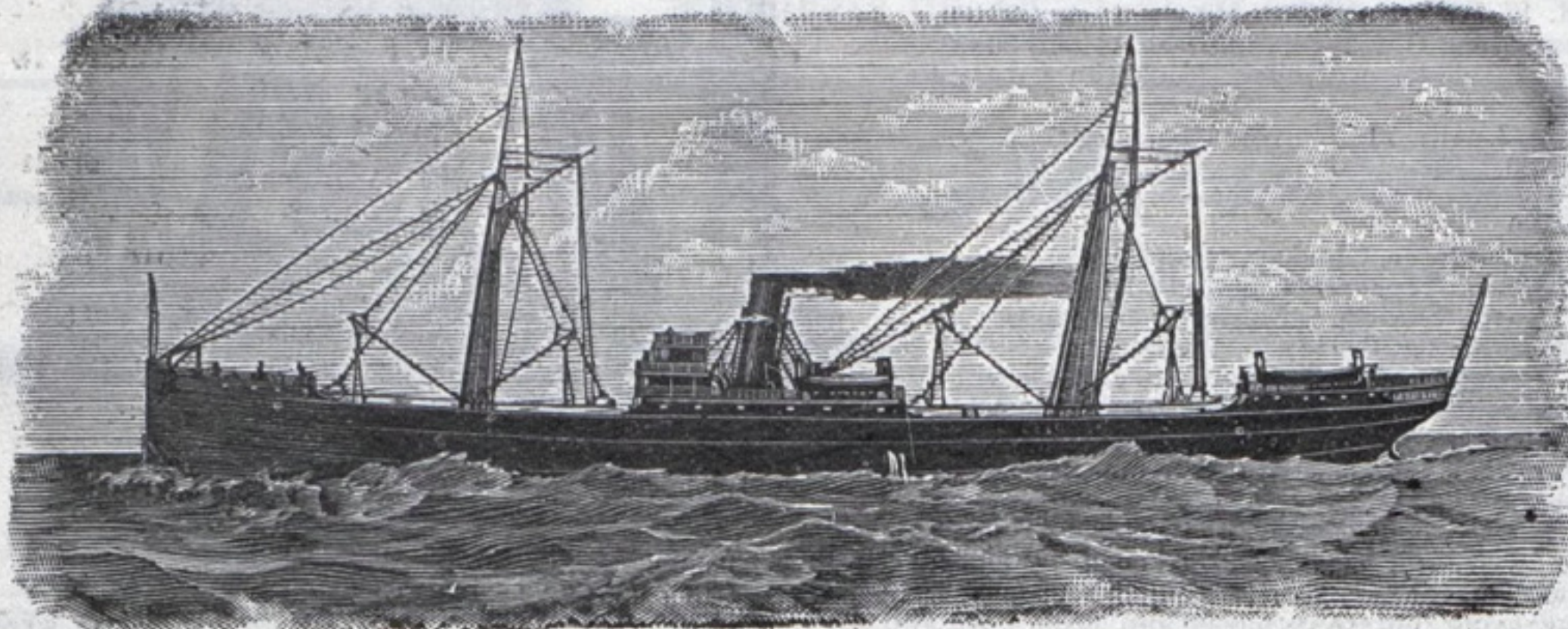
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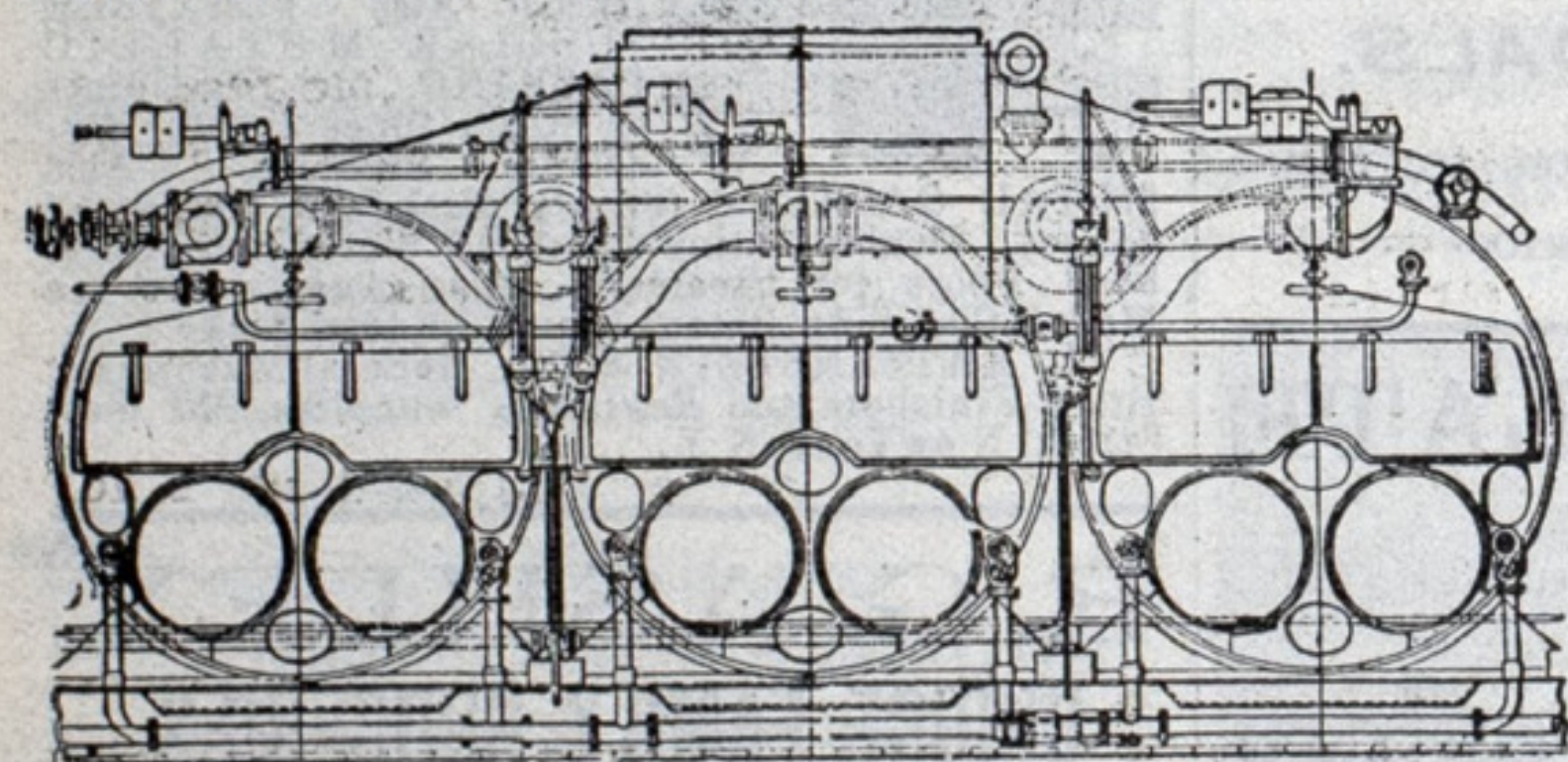
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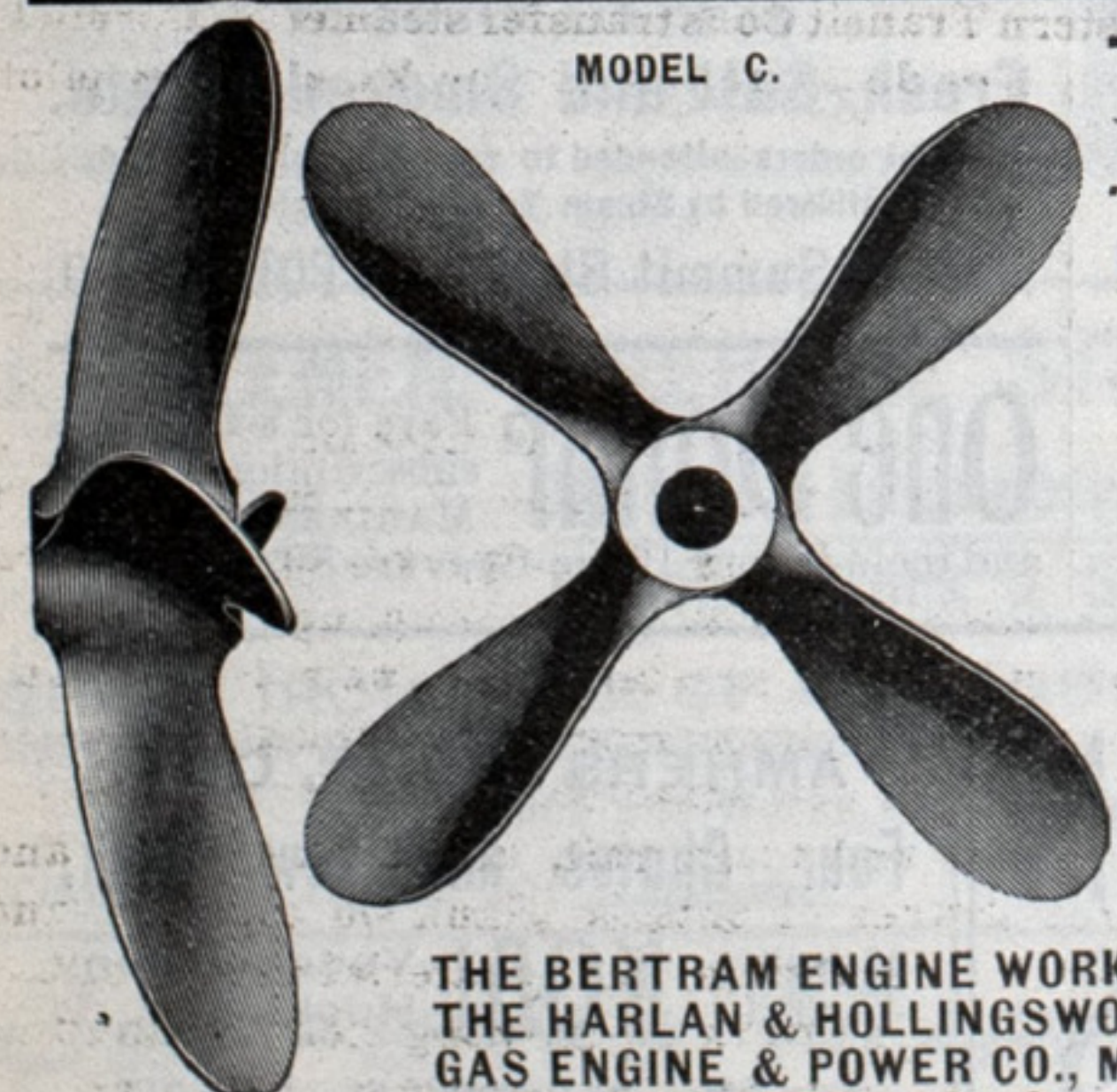
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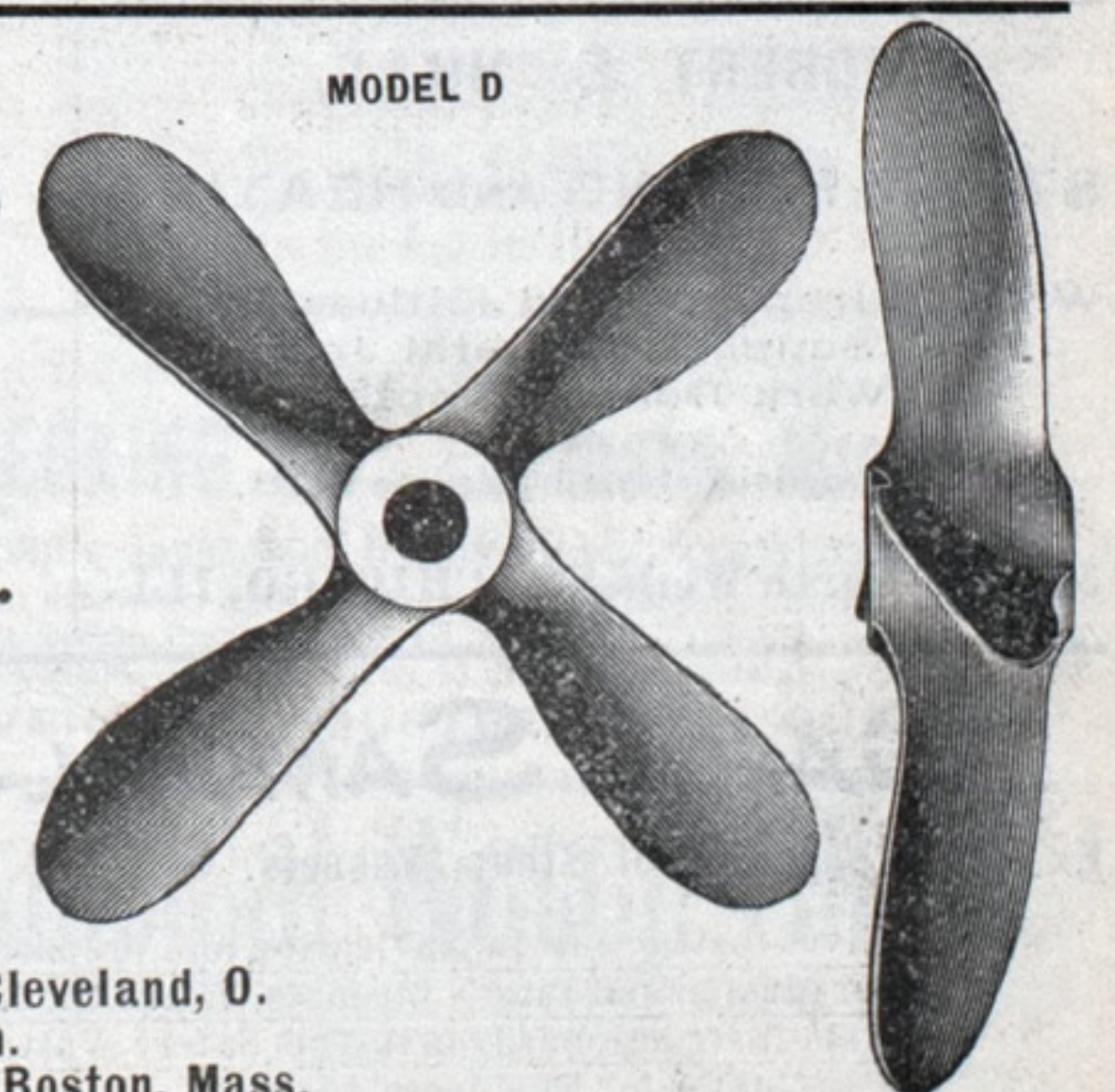
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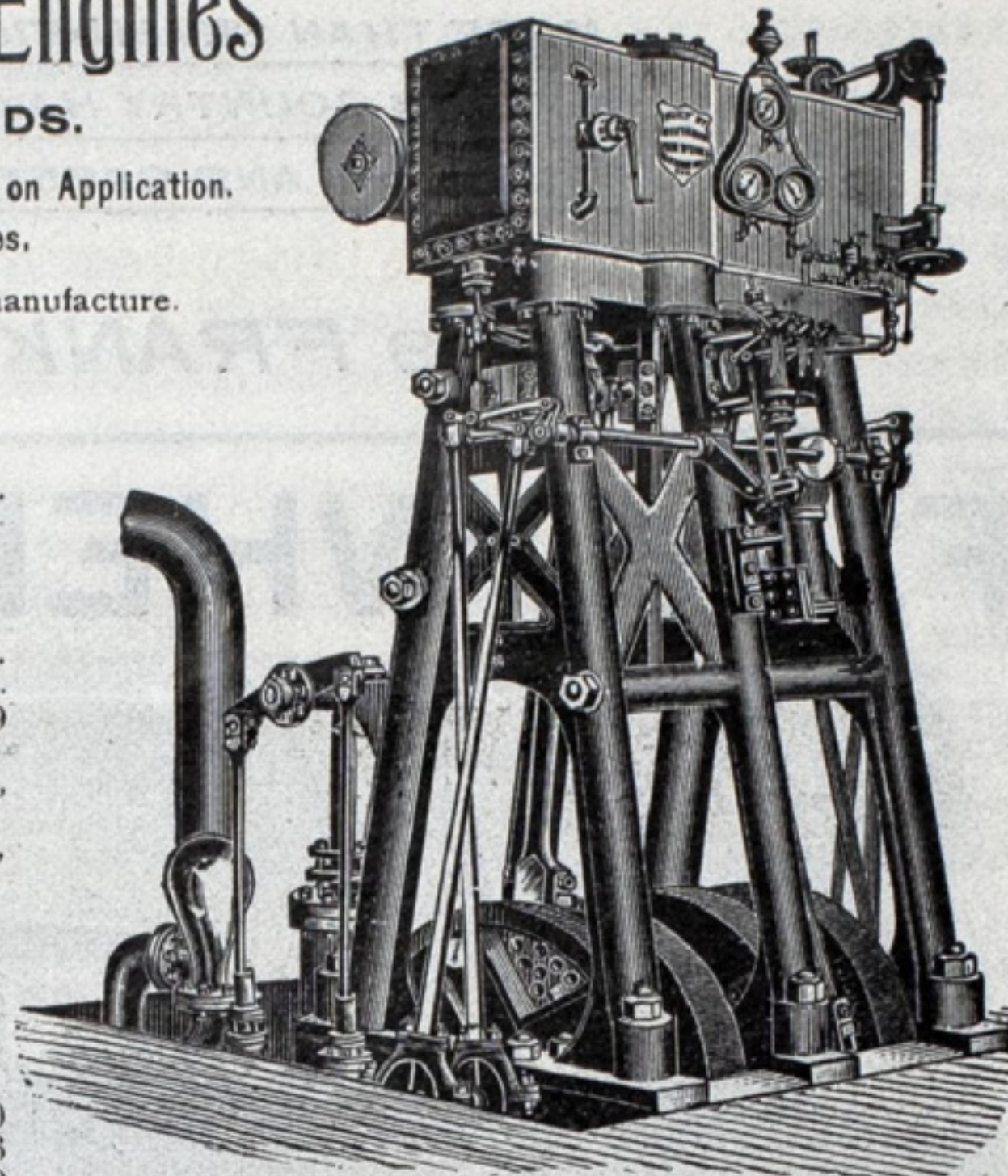
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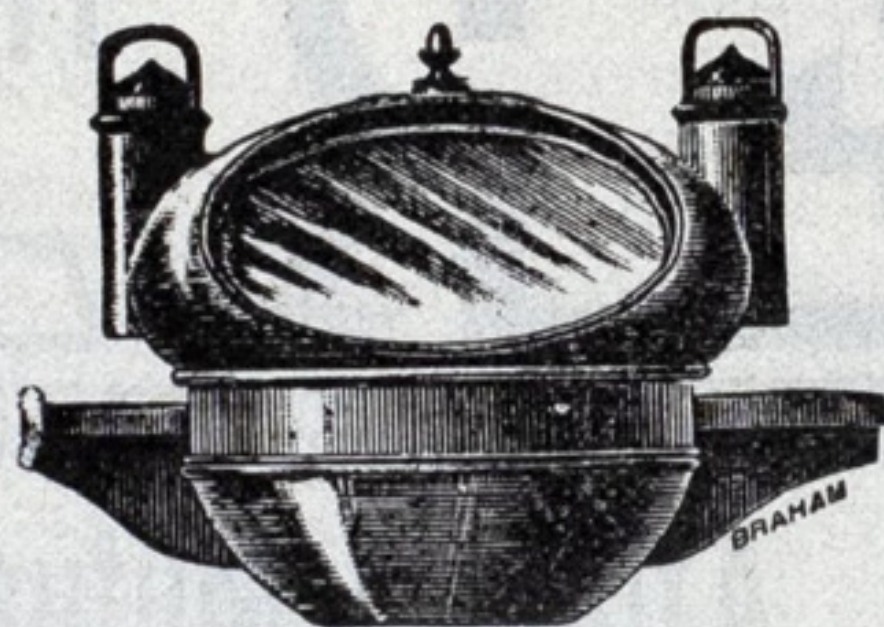
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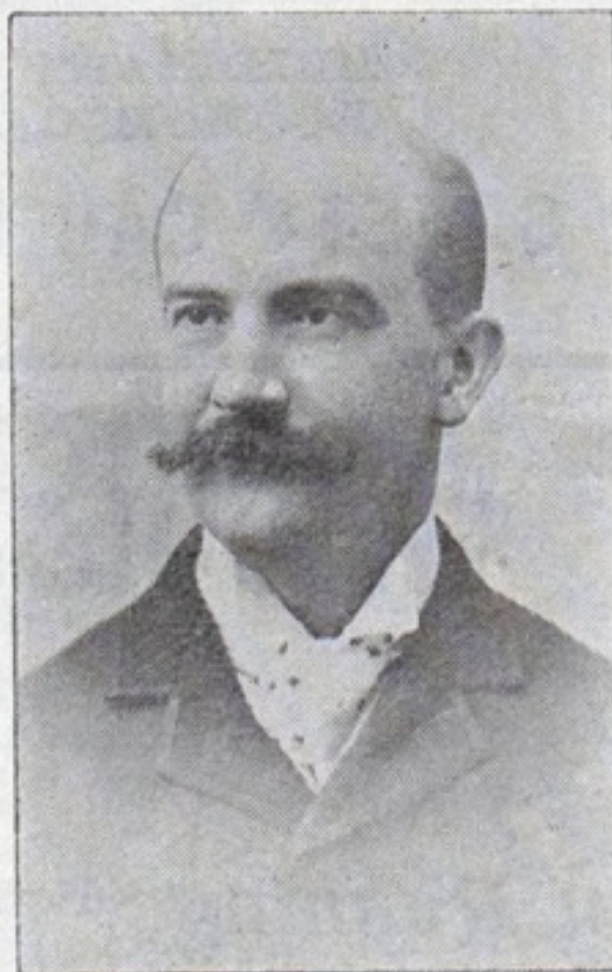
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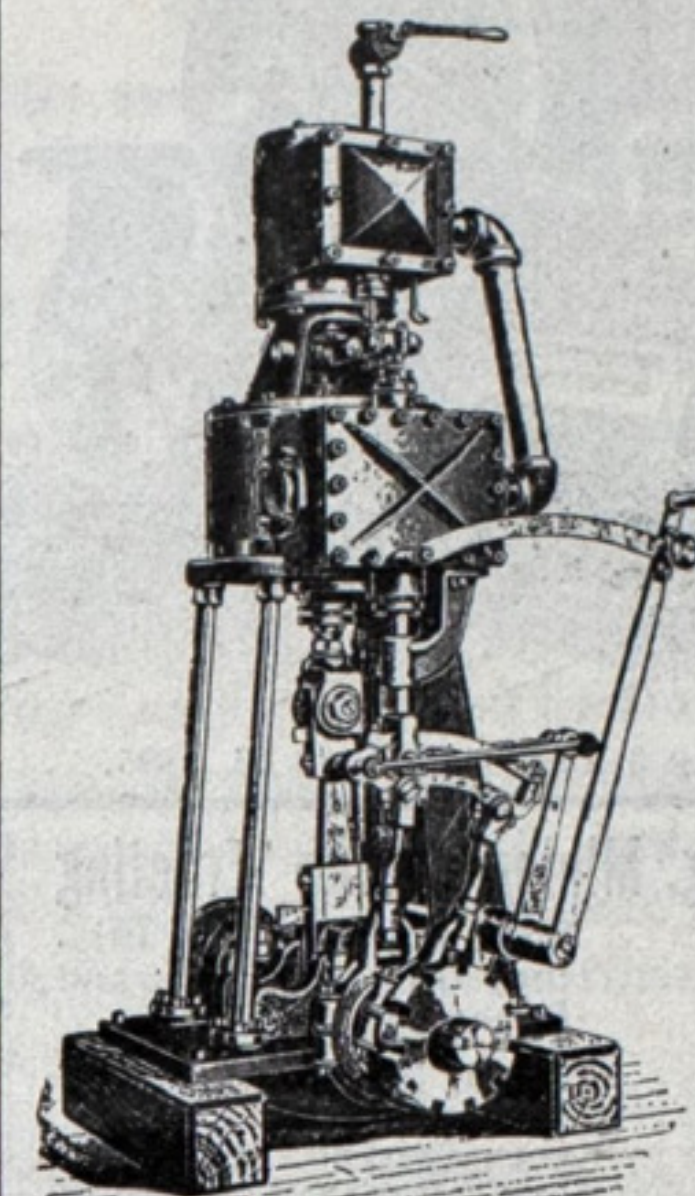
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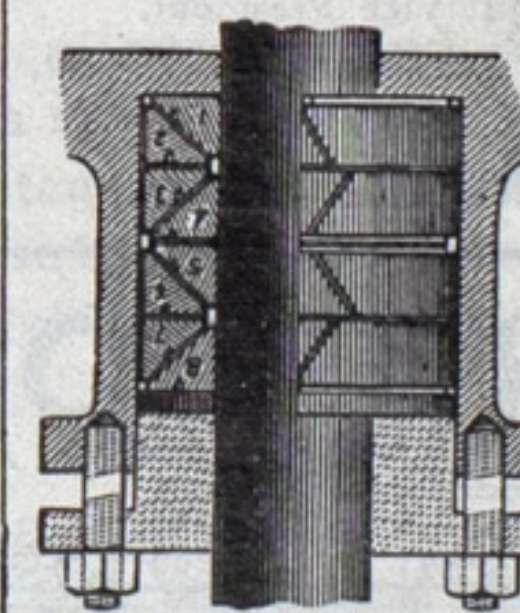
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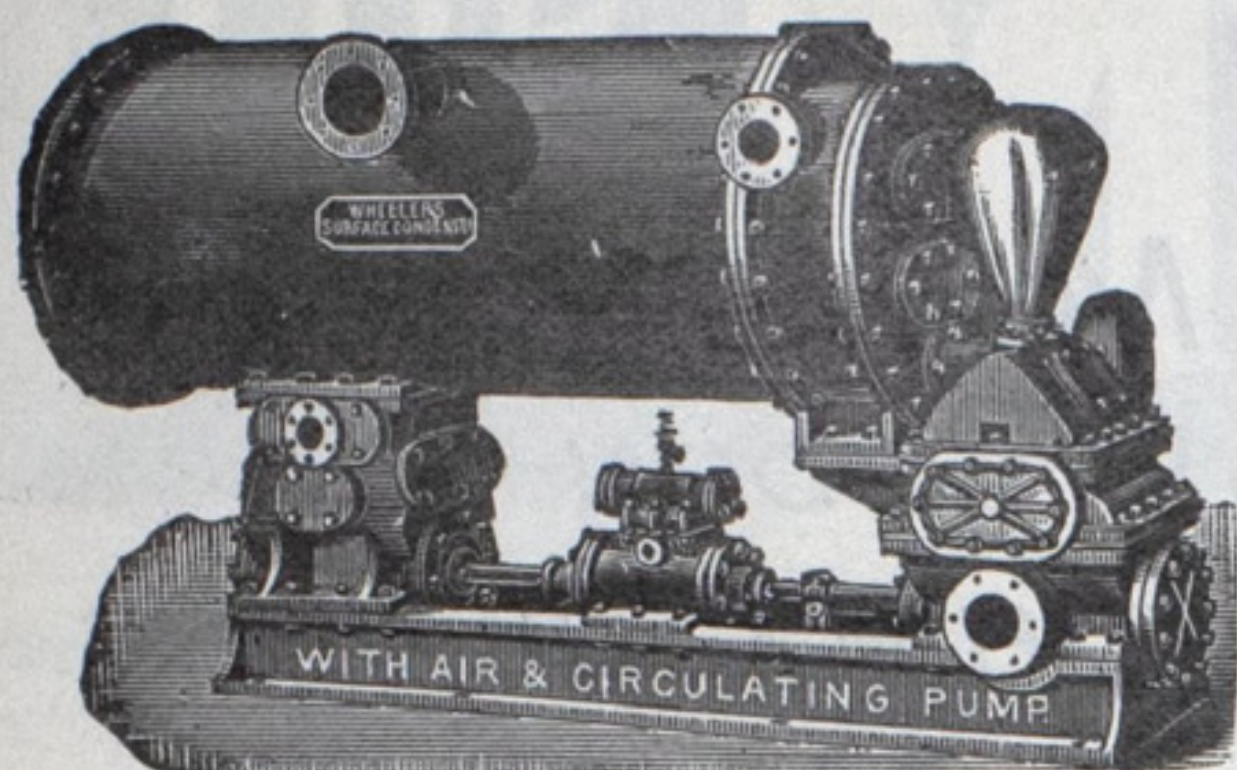
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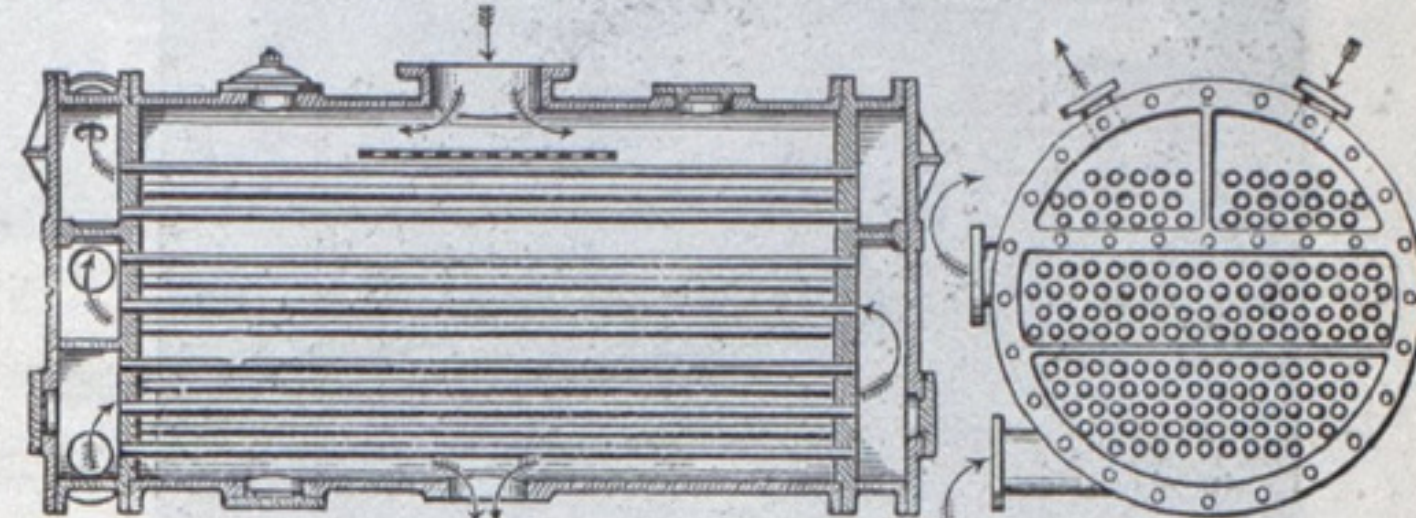
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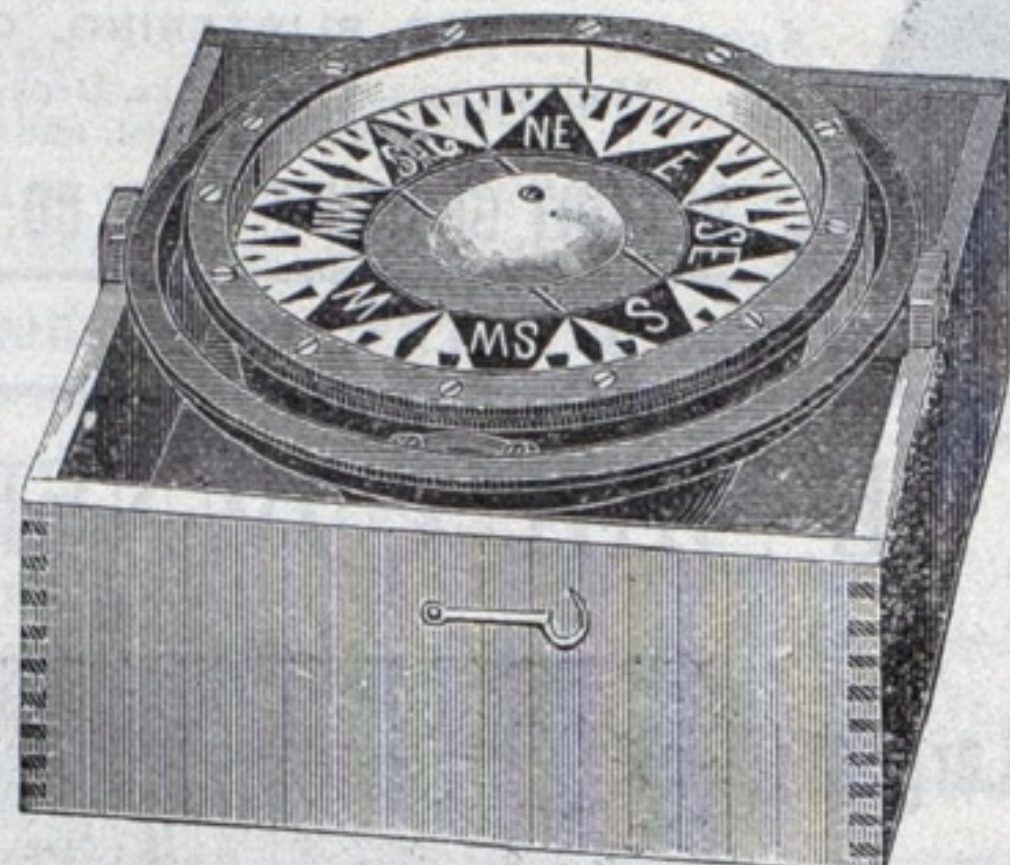
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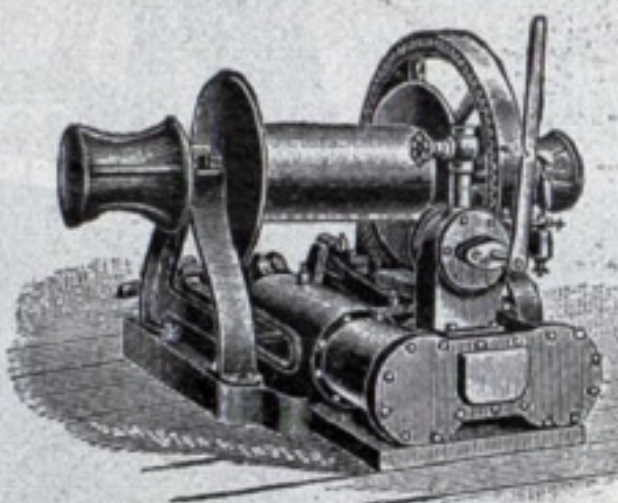
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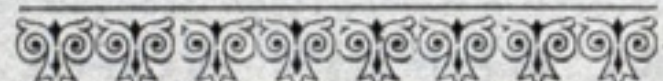
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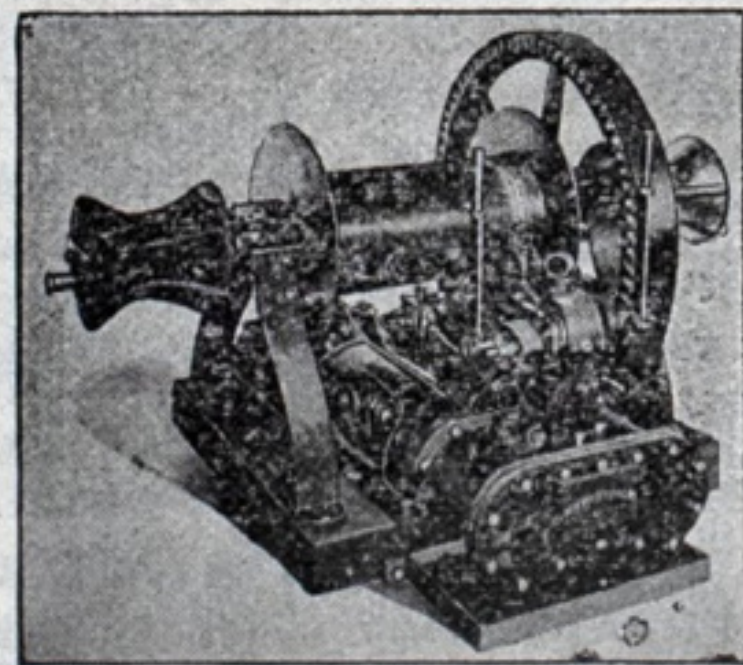


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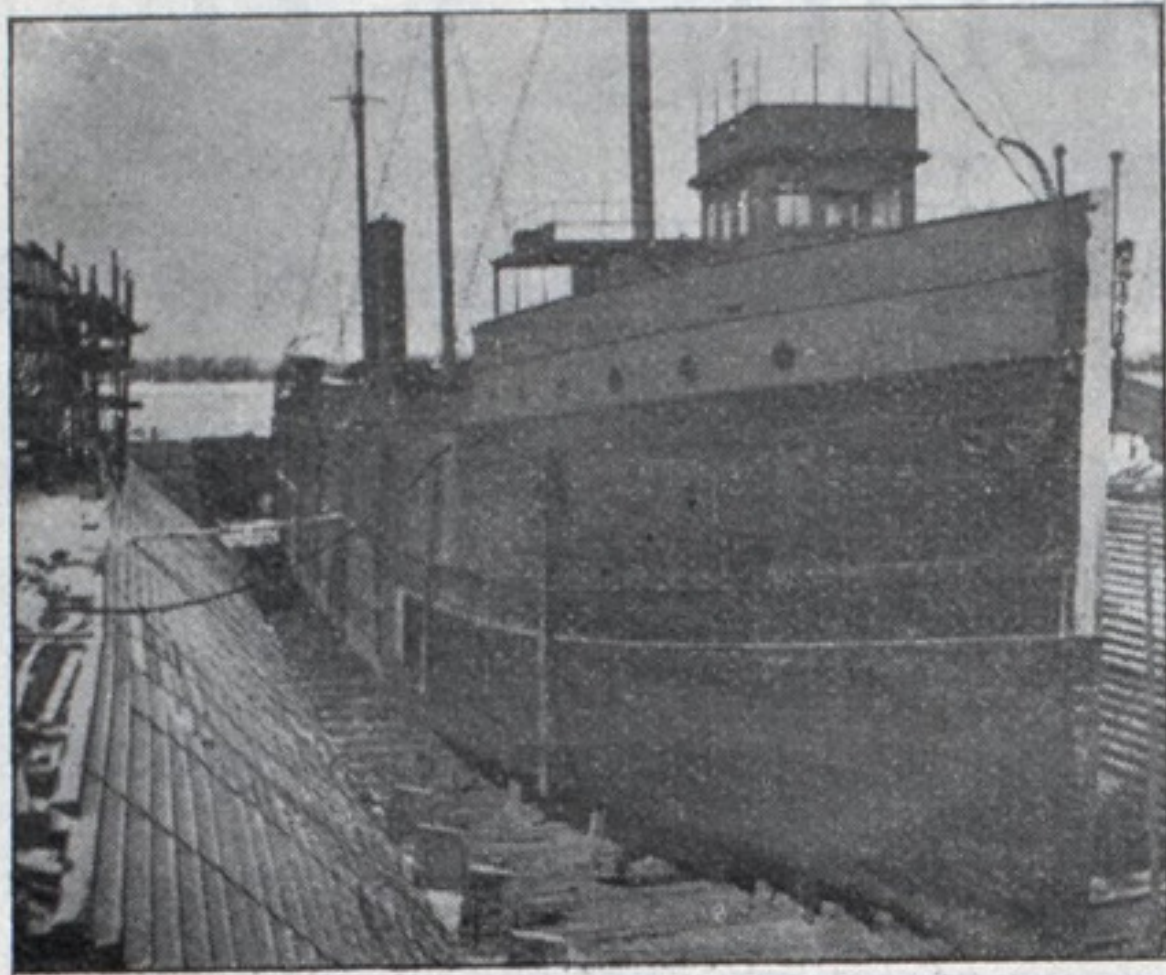
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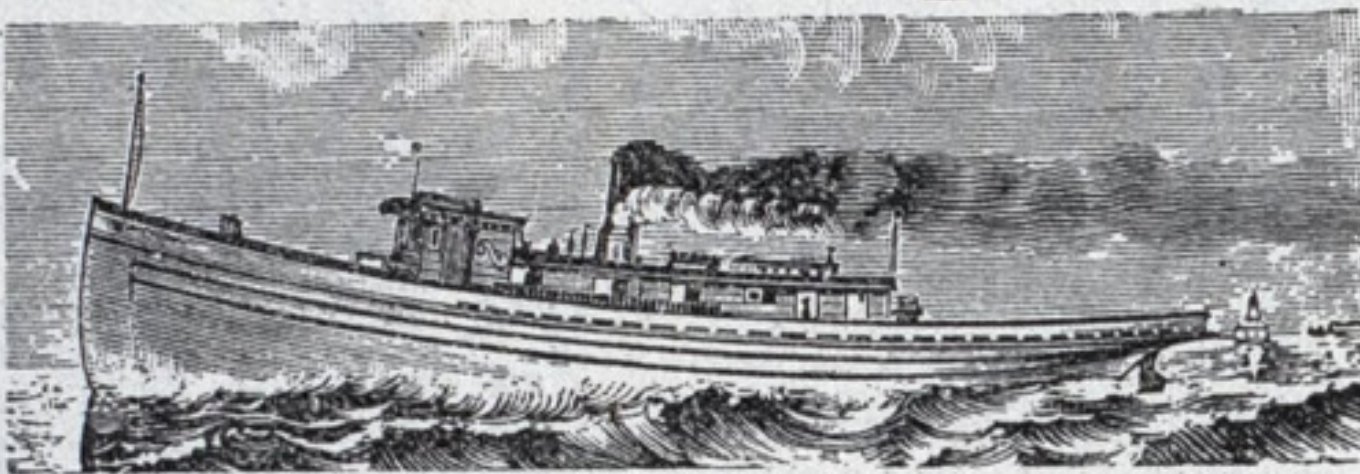
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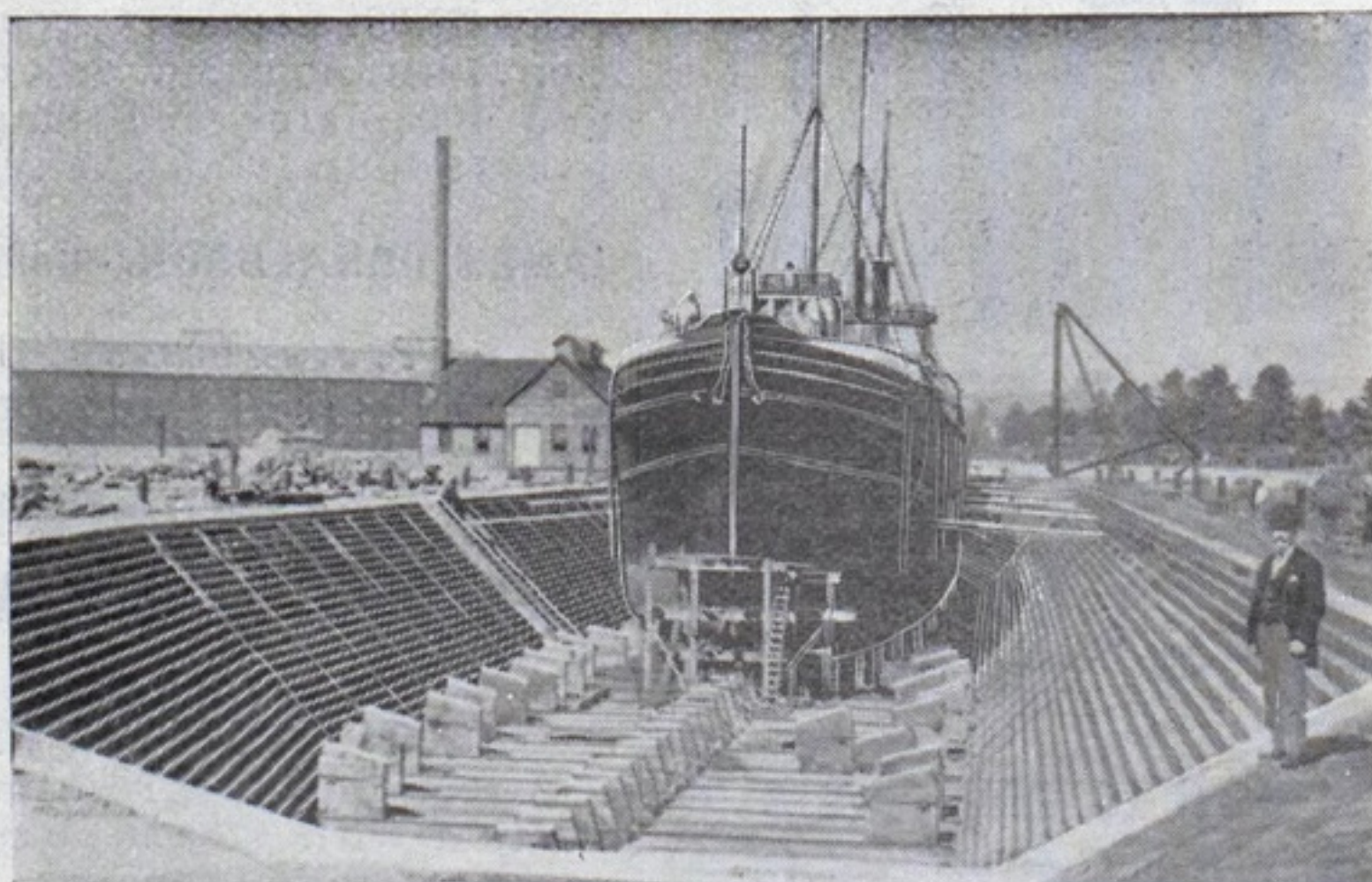
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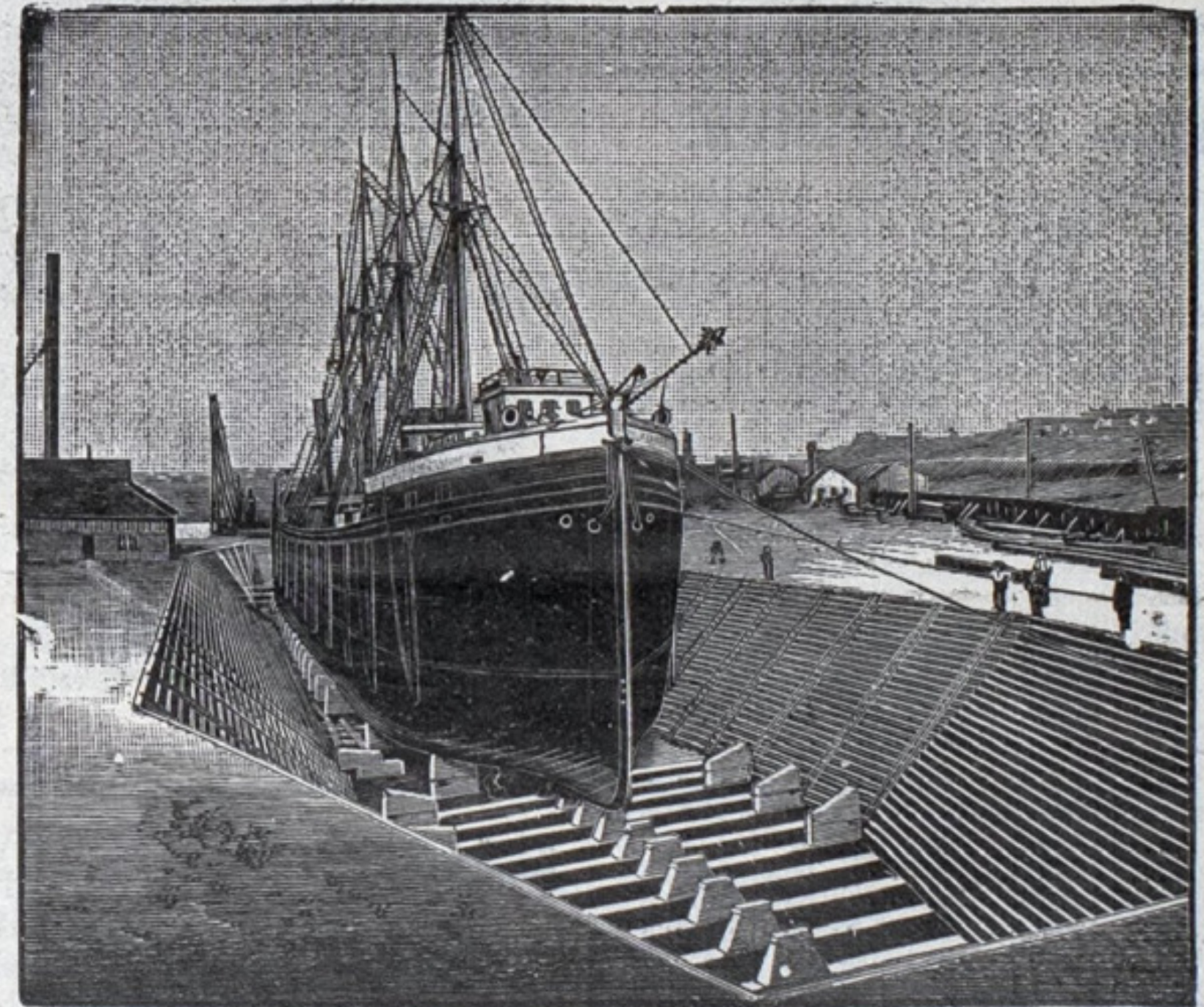
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